

# small air forces observer

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January 1979

# small air forces observer

the newsletter of the Small Air Forces Clearing House

**EDITORIAL:** With this issue, the SAFO becomes a quarterly publication. This was brought about by the high cost of 3rd Class Mail (40¢ per 32 pages) and the decision was made after lengthy soul searching. Rather than raise the subscription rate, I applied for and received a 2nd Class Mailing Permit which will save substantial amounts of money at each mailing. However, to qualify for this permit, it was necessary that SAFO publish 4 times a year. I hope to mail SAFO to the members in January, April, July, & October, with renewal notices included with the April issue. The increased rate of publication will require a similarly increased rate of submission of manuscripts. Those of you who are reluctant to try an article, please note that SAFO needs reviews of books, magazine articles, decals, and kits, but be prepared to wait at least 3 months for your material to appear since SAFO must go to the printer that long before the proposed publication date.

**COVER COMMENTS:** Our front cover this issue is a fine study of a Short Skyvan of the Sultanate of Oman Air Force in its operational environment. (Photo by Short via Fred Bachofner.)

**TAIL PIECE:** The back cover this issue is a photo study of a/c from various Pacific islands: A/c of the Philippine Army Air Corps (see letter by Albert Anido on page 82). A Dakota of the Papua New Guinea Defence Force. (For the history of this a/c see SAFO #9, page 17.) Philippine GAF Nomad. (Photo credit: 1-2 via Albert Anido. 3-6 by Colin Owers, Historical Aircraft Archives.)

**SAFO EDITORIAL POLICY:** The purpose of the SAFCH is to "promote interest in the history and modeling of the aircraft of the smaller countries of the world". In support of this goal, the SAFO will publish articles on all aspects of aviation (both military and civil) from all periods of time and for all the smaller countries. To insure that the SAFCH remains a "member oriented" organization, the following guidelines have been adopted: (1) All manuscripts submitted by members will be published in the next available issue of the SAFO. (2) Subscription money will be used only to print and mail the SAFO. There will be no "miscellaneous" column in our budget. And, (3) members are encouraged to sponsor SAFCH memberships for individuals, organizations, and libraries (especially those in countries where US funds are difficult to obtain).

**BACK ISSUES:** New subscriptions will begin with all issues of the volume current at the time the subscription request is received. Earlier volumes are available at \$6 for each 4-issue volume, with Xerox copies replacing back issues as they run out. All money realized from the sale of back issues will be used to increase the number of pages in the current volume.

**SUBSCRIPTION RATE:** Subscription to the SAFO is US \$ 4.00 for 4 issues. Send remittance to James V. Sanders, 27965 Berwick Dr., Carmel, CA 93923, USA.

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Second-class postage paid at Carmel Valley, CA 93924.

From Gus Morfis (SAFCH #3) comes a suggestion for an "Inquiry Column" that might work as follows: "Joe Doakes writes in 'How many P-36 did France have at the start of WW II?' This question is printed in the next available issue, and if the editor has the information available, it is given also. It is more likely, however, that he does not. So the question stands. Any of the readers who have this information or an opinion or any comment on the question writes in to the editor with their comments. All the answers are edited and summarized and a combined answer appears in the next issue, crediting all those who responded. If the editor feels that one or more of the answers have sufficient merit those letters can be run as is, with acknowledgements of the other replies. If there are contradictory answers, they should be aired; sometimes a very lively correspondence can develop over a number of issues."

I think that this is a great idea for the SAFCH and it fits in perfectly with my ideas about spreading the SAFO work load. If you have a fair reference library and access to a good typewriter, here is your chance to become a real-live editor.

I suggest that all questions and answers be sent to the "editor for information", who will work up his column and then send his manuscript to me for inclusion in the SAFO. Questions should be specific and should require only a short answer and no drawings (unless the editor turns out to be a frustrated artist too). Letters need not be answered directly. These are only suggestions. Rules can be determined by the "editor". Any volunteers?

**MEXICAN AIR FORCE DECALS:** #8 Navy Kingfisher (on floats), \$1.25. #9 MAF Kingfisher (on wheels), \$1.25. #10 MAF Vampire (dark green), \$1.25.

## SAFCH DECAL SURVEY

Recently I received two letters from SAFCH members interested in manufacturing small air force decals for sale. Both asked my opinion about what countries would sell best. One of these requests came from a new group wanting to get into the business and the other from a source well known for excellent decals. In both cases, I replied that I did not have any hard facts on the preferences of our members, let alone those of the general modeling public. However, I did give them my general feelings as gathered from correspondence - Middle East & Latin America tied for first, followed closely by Africa, with Eastern Europe further behind.

To provide these people with concrete information about what decals you want, I would like to conduct the first SAFCH survey. You are invited to send me a list of all countries whose national insignia you would like to see on decals. Since I hate surveys that ask for the five most wanted (too many decisions), you can list as many countries as you like (as long as you don't exceed 100). but please list them in order of preference. When I tabulate the votes, I'll give your first choice 100 points, your second 99, etc. You don't have to include 100 countries on your list; you can list only ten and your choices will still get the same weight as those from a larger list. A big problem concerns the use of different insignia at different times by the same country. Rather than try to break things down into time periods, let's keep it simple and list only countries. We can let the manufacturer decide which variants he wants to include. Send your lists to the SAFCH editorial office. I'll tabulate the results, send them on to the potential manufacturers (and if the response is great enough, to other decal companies), and publish the results in the SAFO. If you like this idea, perhaps we can run a similar survey for kits.

## THE F80C IN LATIN SERVICE

The following countries in Latin America utilized the Lockheed F-80C Shooting Star: Brazil; Columbia; Chile; Ecuador; Peru and Uruguay.

### 1. Brazil:

At least 33 F-80's were received by Brazil from 31 Mar 1958 on. The last F-80 was retired from service as of 16 Aug 1973.

The serial number range for F-80's in service was FAB 4232. Most aircraft were assigned to the 4 Grupo de Caza.

At least three confirmed color schemes were sported by the F-80's during their service lives. I have included two here. The third I have not enough information to prepare an accurate drawing. The aircraft serial FAB 4201 was painted what appears to be white, with possible red trim. The nose insignia is of a Joker and there are stars along the fuselage sides. Color information and a good shot showing the fuselage sides and tip tanks are needed before I can publish this scheme.

### 2. Chile:

At least 18 aircraft were received between 1 Jan and 31 Mar 1958. These aircraft were still in service as of Dec 1963. I do not have the retirement date of these aircraft.

Some of the known serials are: J-333, 335, 338, 339, 340, 341, 342, 959 and 960. Serial styles vary from aircraft to aircraft. Some carrying the stencil type (J- ) and others carrying the plain type (J- ). Some aircraft carried the full serial on the nose, others just the numbers.

These aircraft were assigned to the 7th Fighter Bomber group at Los Cerrillos. The badge of the 7th was carried by some a/c (J- ). (I need details of this badge.)

### 3. Colombia:

At least 16 aircraft were received starting 15 Dec 1954. These were the first jet aircraft received by Colombia. Service life ran from 1954-1966. Nine or ten aircraft were returned to the U.S. in 1956.

Serials known are: FAC 2061, 2065, 2057. The photo of FAC 2061 is as the aircraft is now; on display at El Dorado Air Base, Bogota Colombia.

At least three different schemes were carried by these F-80's. I need a confirmation as to the colors on scheme #2 as I did all the work off a B&W photo.



LOCKHEED F-80C Shooting Star, on display at El Dorado Air Base, Bogota, Colombia, 1974. Photo by Herb Rowe Jr.

### 4. Ecuador:

This has been the toughest to get information on. The only shot is of a returned aircraft at Davis-Monthan AFB. This aircraft has had all markings removed but the numbers are still visible and the positions of the fuselage insignia and fin flash are visible. I have no information on the wing markings.

At least 16 aircraft were received between 1957 and 1958. Six aircraft were returned to the U.S. by July of 1965.

Some serials known are: 47-184; 49-769; 49-867; 48-884; 49-851 and 49-1872.

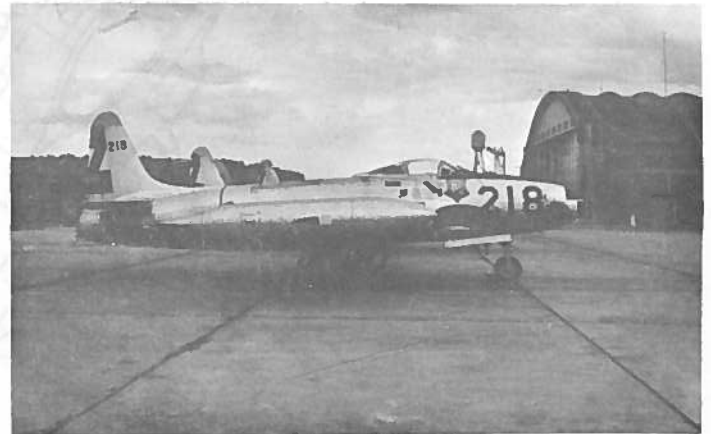
The F-80's were assigned to the 2121 Sqn. Anyone with further information and a photo of an operational F-80 in Ecuador please contact me.

### 5. Peru:

Little is known about these aircraft. We know that at least 4 aircraft were in service. The only known photos show the same four aircraft. I have no information on dates delivered, service life, squadron assignments, etc. Serials known are FAP 152, 156, 153, and 166.

### 6. Uruguay:

The F-80 replaced the F-51 in service with Grupo 2 (Caza) in 1958-1960. At least 14 aircraft were received.



LOCKHEED F-80C of the Uruguayan Air Force. Photo via Gary Kuhn.

Serials known include: FAU 217, 210, 211, 218, 221, 223 and 216.

These aircraft were to be replaced by ex-Argentine F-86's but export permits from the U.S. for the F-86's could not be obtained. Uruguay has received A-37's and perhaps these will replace the F-80's.

Not all aircraft carried the Grupo 2 badge. FAU did not. It is not certain that the badge was carried on both sides. I have heard rumors of a camouflaged F-80 but I have seen no photos or have any hard information.

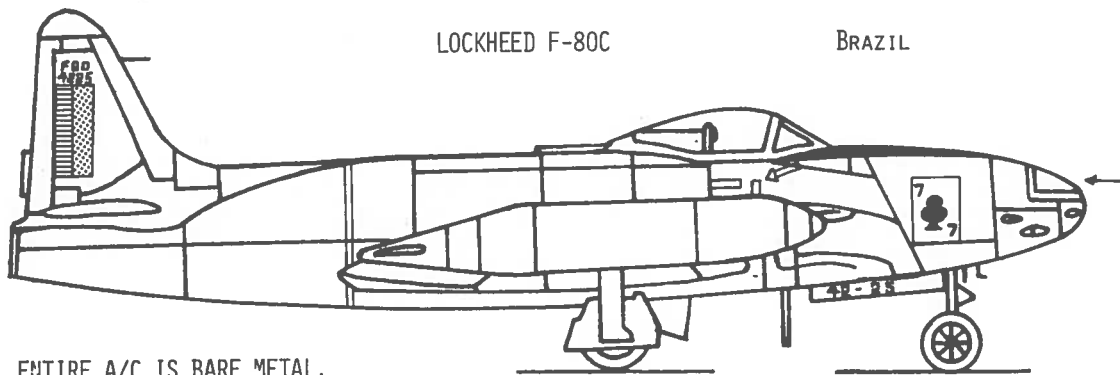
Sources for information in this report have been: D.P. Hagedorn; G. Kuhn; Flying Review International 10-68; Air Classics Quarterly, Vol 3 #1; Historia de la Aviacion en Colombia.

Again as with the F-51 article in SAFO #8 this represents the best information that I have at this time. As more information becomes available I will publish corrections and additions. Any members with any information on these or any other aircraft in Latin America are urged to contact me.

N. J. Waters III (SAFCH #2)

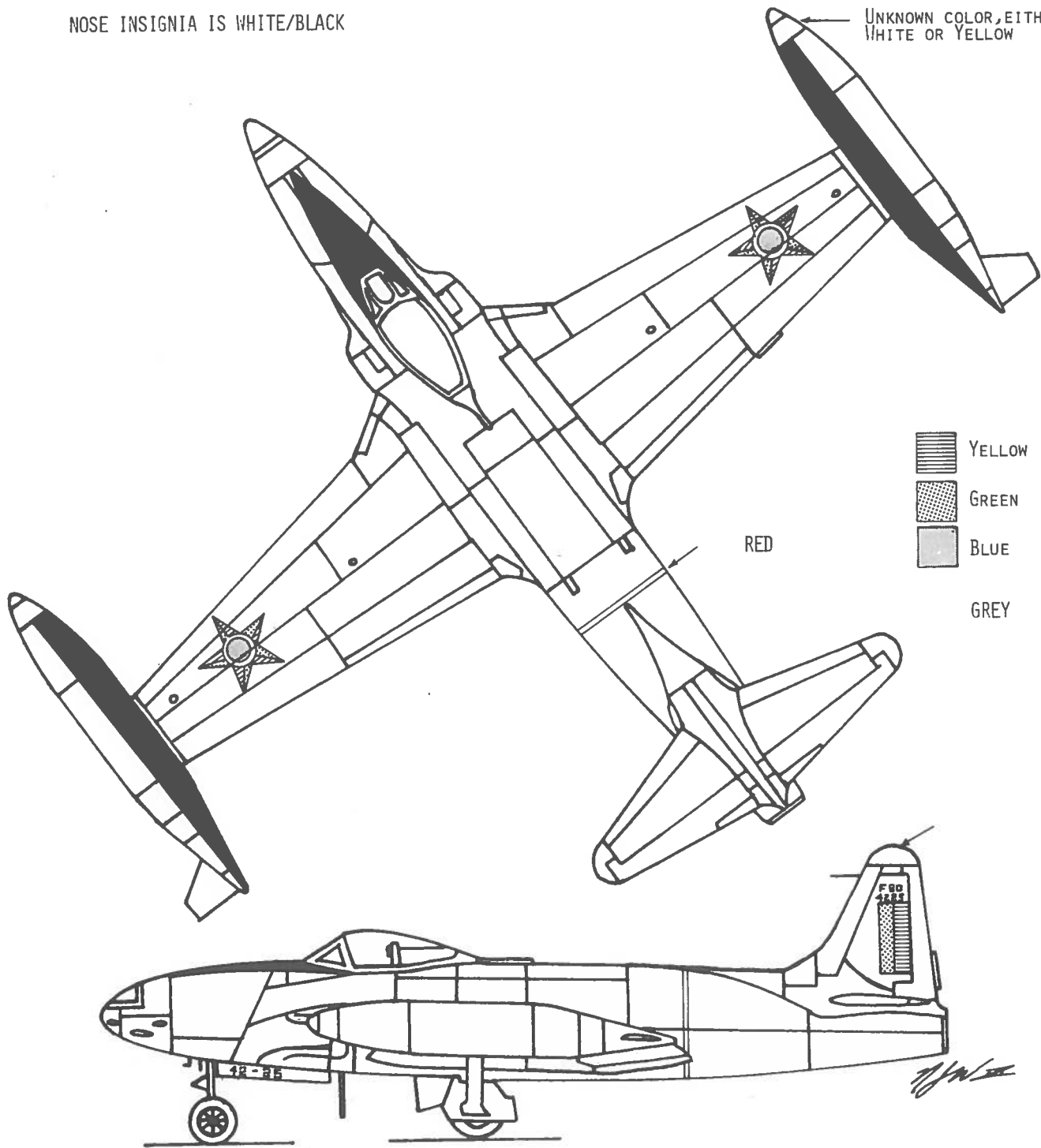
LOCKHEED F-80C





BRAZIL



ENTIRE A/C IS BARE METAL.  
NOSE INSIGNIA IS WHITE/BLACK

UNKNOWN COLOR, EITHER  
WHITE OR YELLOW

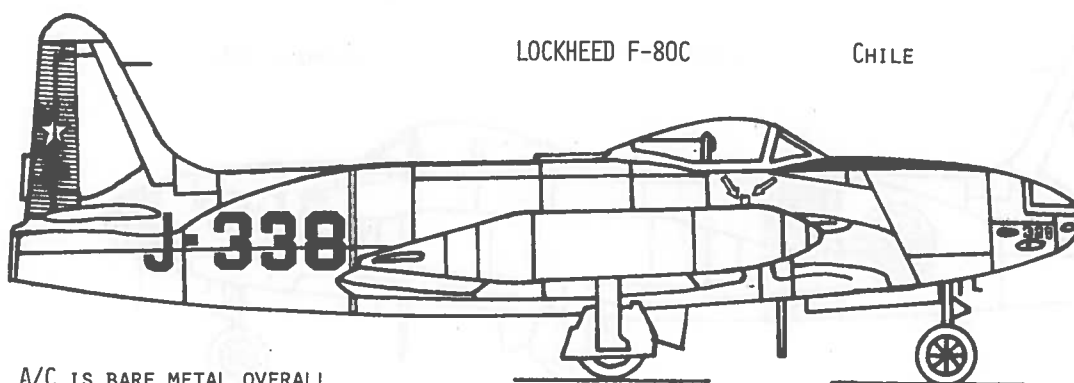


-  YELLOW
-  GREEN
-  BLUE
-  GREY

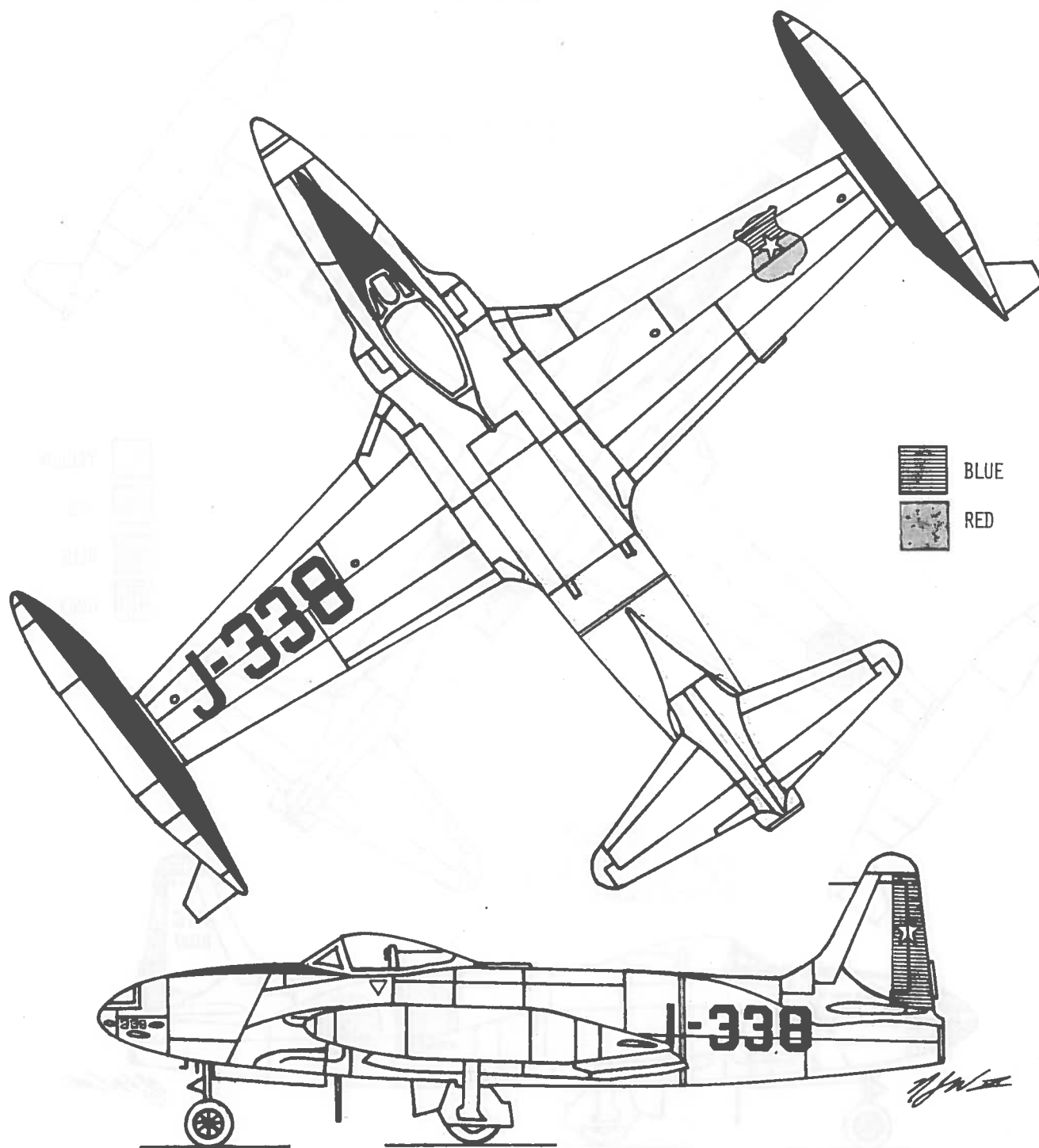
RED

LOCKHEED F-80C

CHILE



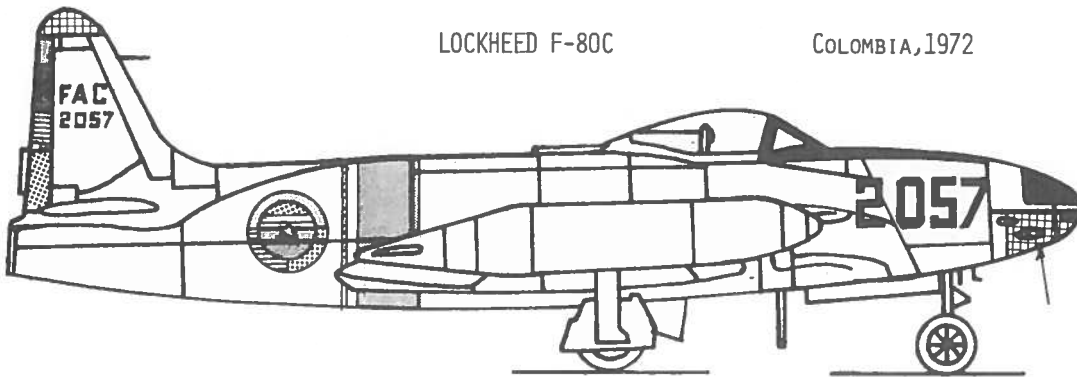
A/C IS BARE METAL OVERALL



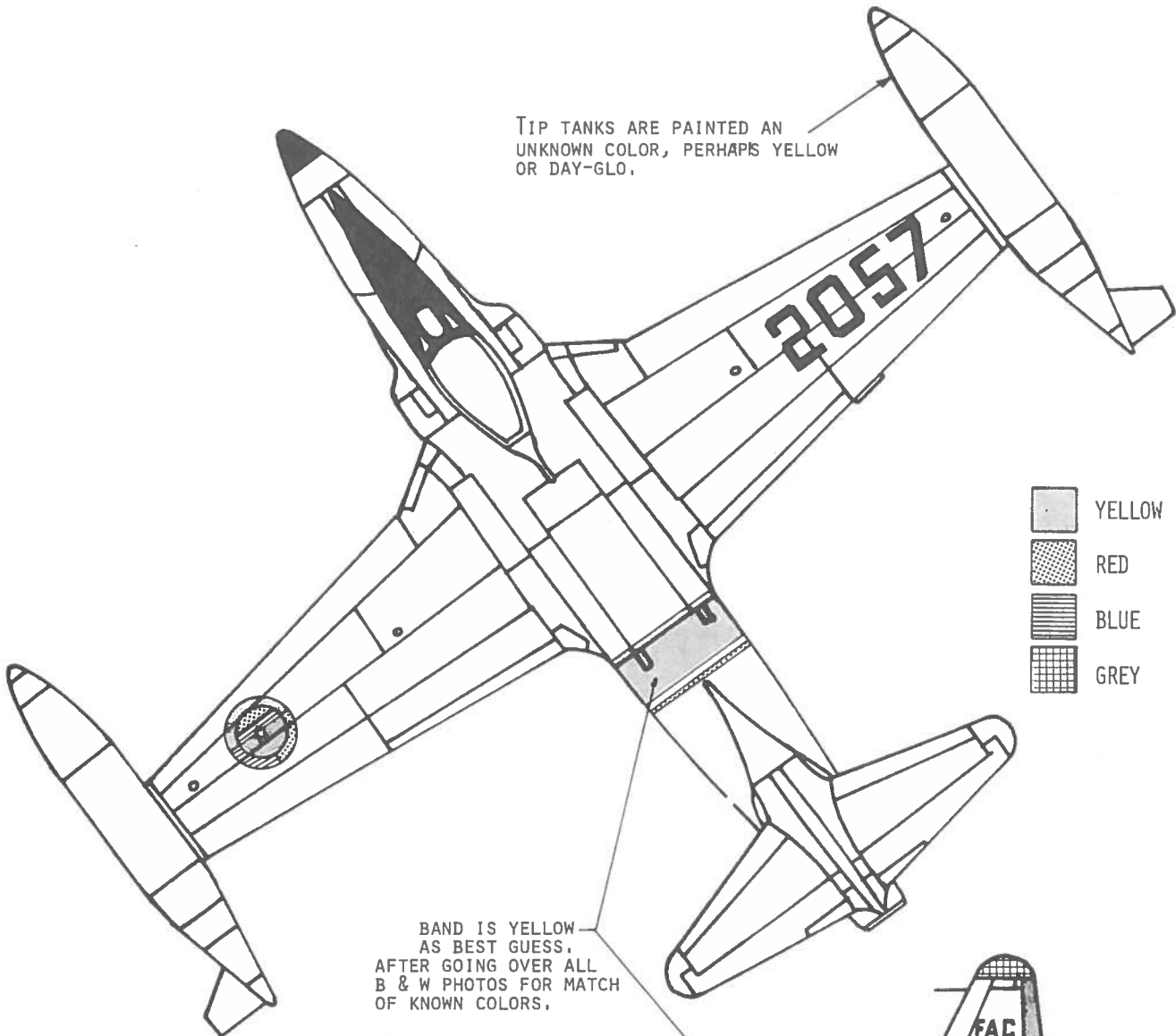
BLUE  
RED





LOCKHEED F-80C

COLOMBIA, 1972

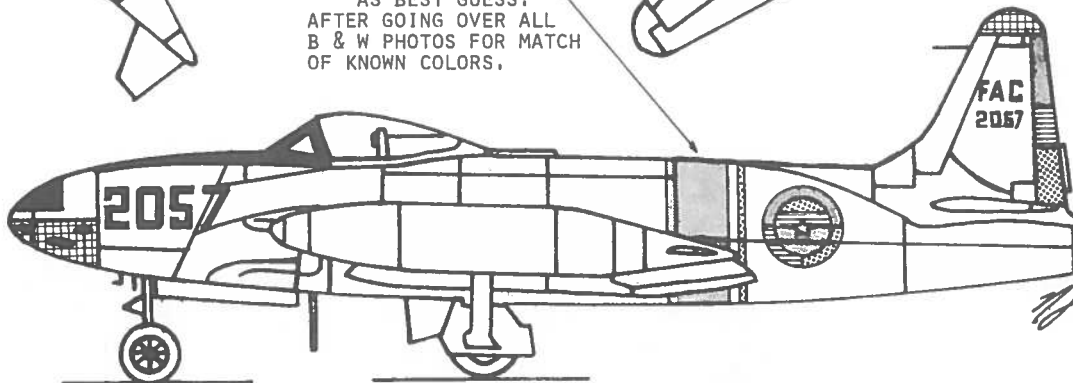


TIP TANKS ARE PAINTED AN UNKNOWN COLOR, PERHAPS YELLOW OR DAY-GLO.



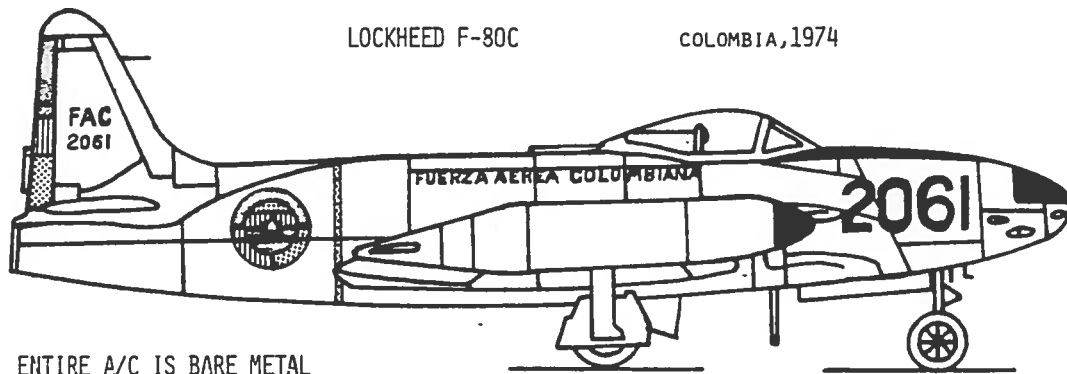
-  YELLOW
-  RED
-  BLUE
-  GREY

BAND IS YELLOW AS BEST GUESS. AFTER GOING OVER ALL B & W PHOTOS FOR MATCH OF KNOWN COLORS.

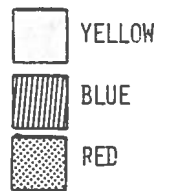
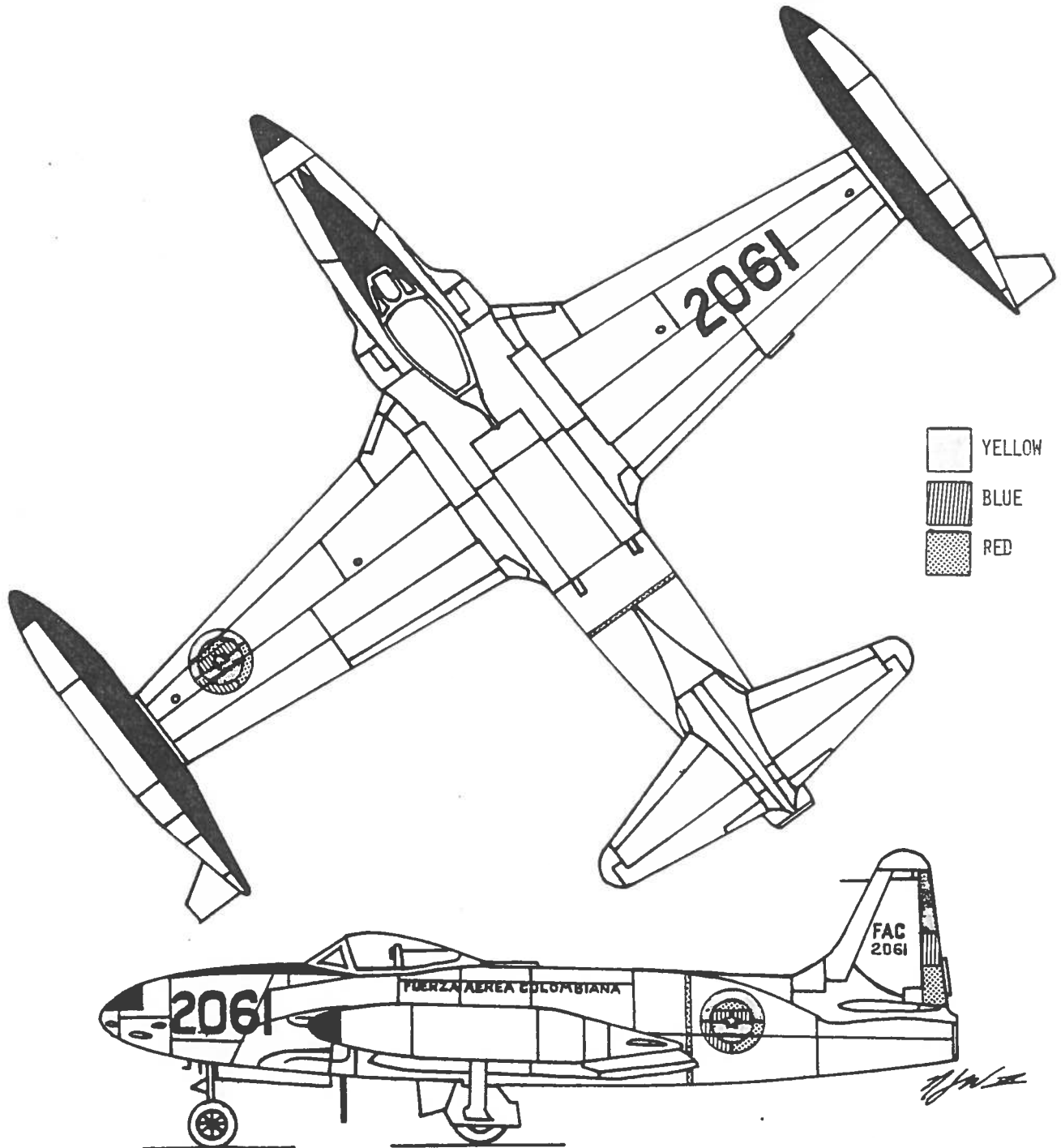


LOCKHEED F-80C

COLOMBIA, 1974

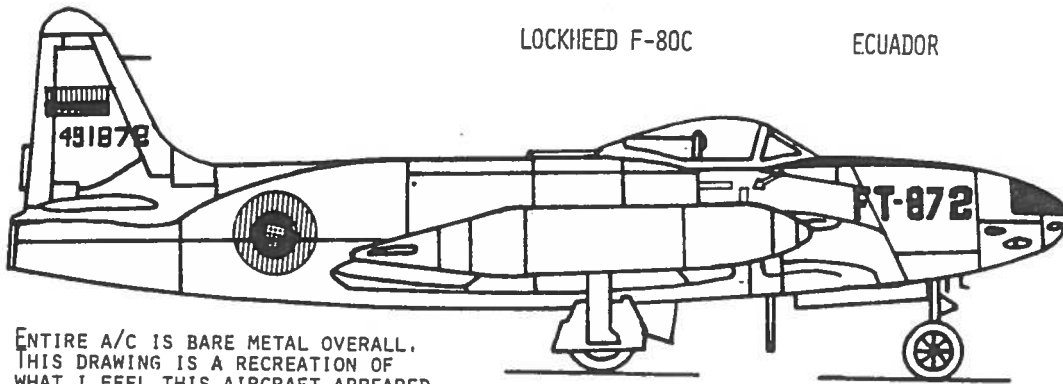


ENTIRE A/C IS BARE METAL

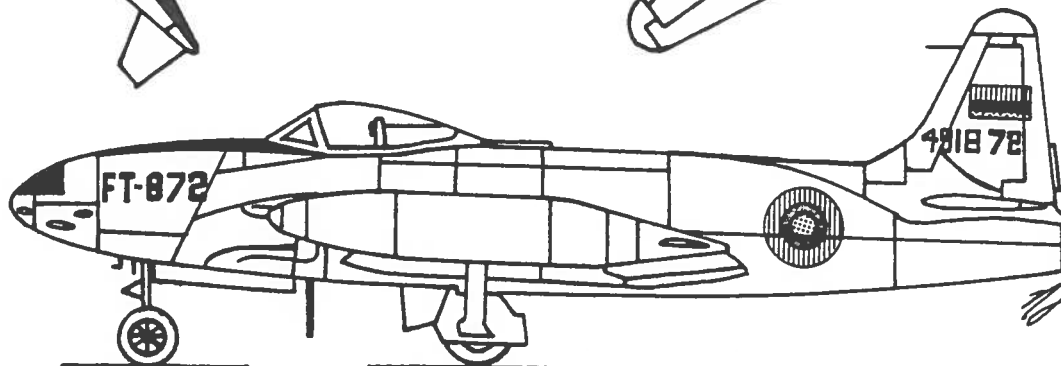
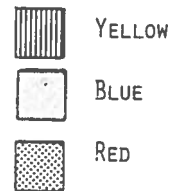
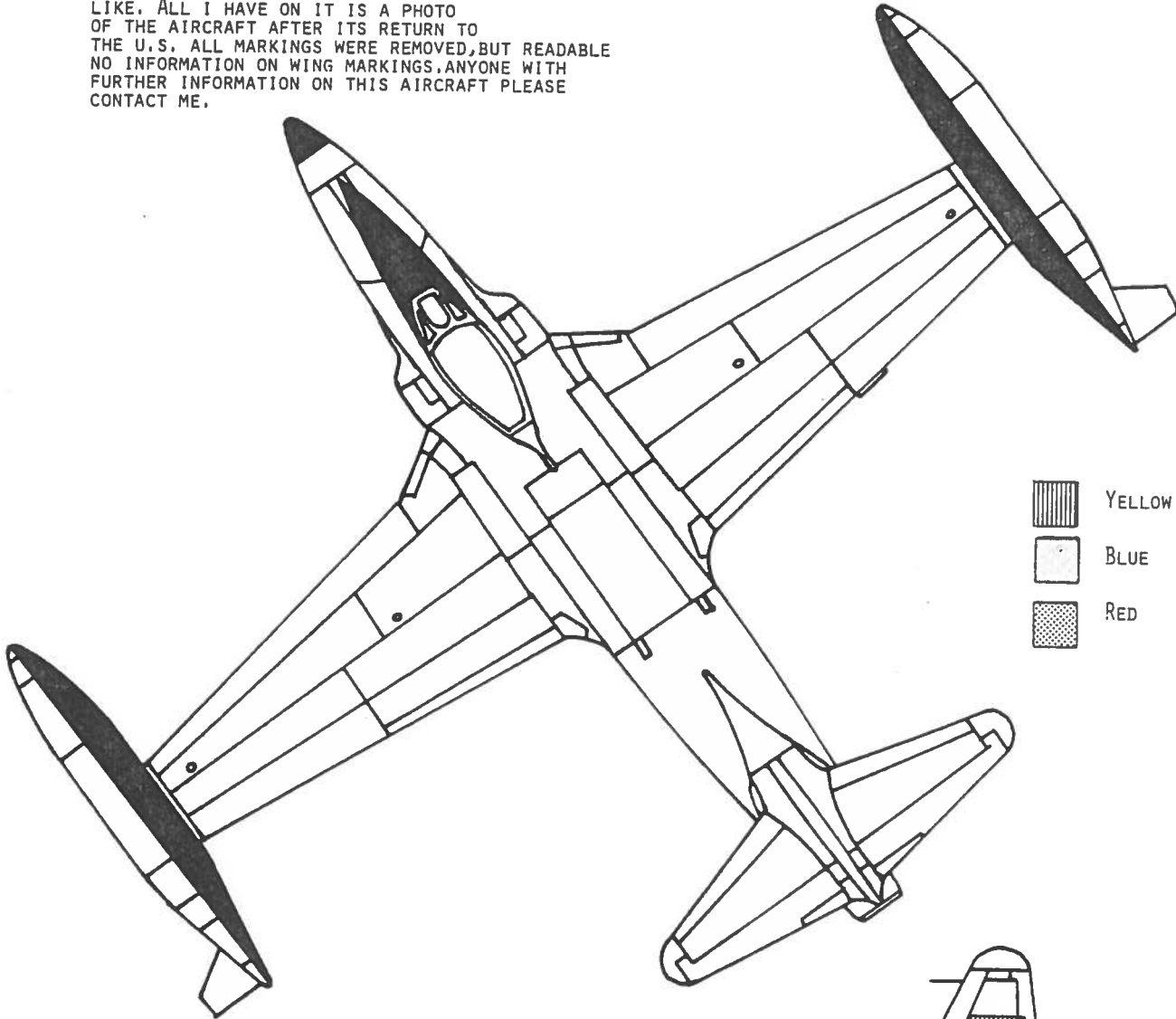


LOCKHEED F-80C

ECUADOR



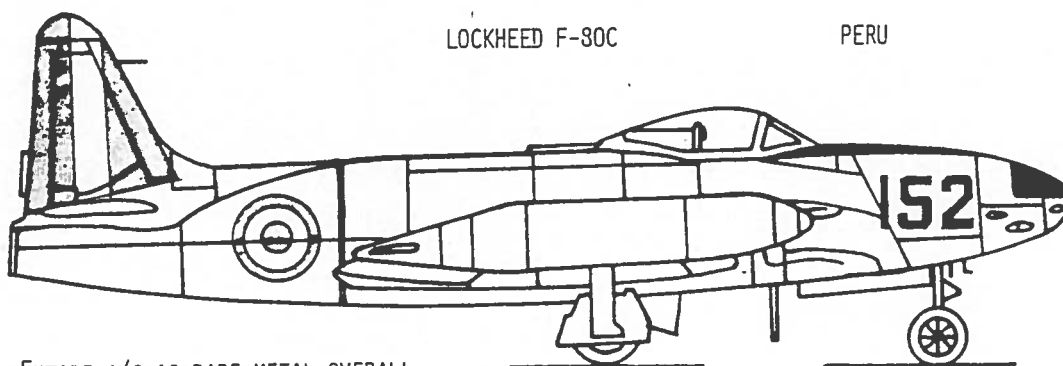
ENTIRE A/C IS BARE METAL OVERALL.  
THIS DRAWING IS A RECREATION OF  
WHAT I FEEL THIS AIRCRAFT APPEARED  
LIKE. ALL I HAVE ON IT IS A PHOTO  
OF THE AIRCRAFT AFTER ITS RETURN TO  
THE U.S. ALL MARKINGS WERE REMOVED, BUT READABLE  
NO INFORMATION ON WING MARKINGS. ANYONE WITH  
FURTHER INFORMATION ON THIS AIRCRAFT PLEASE  
CONTACT ME.



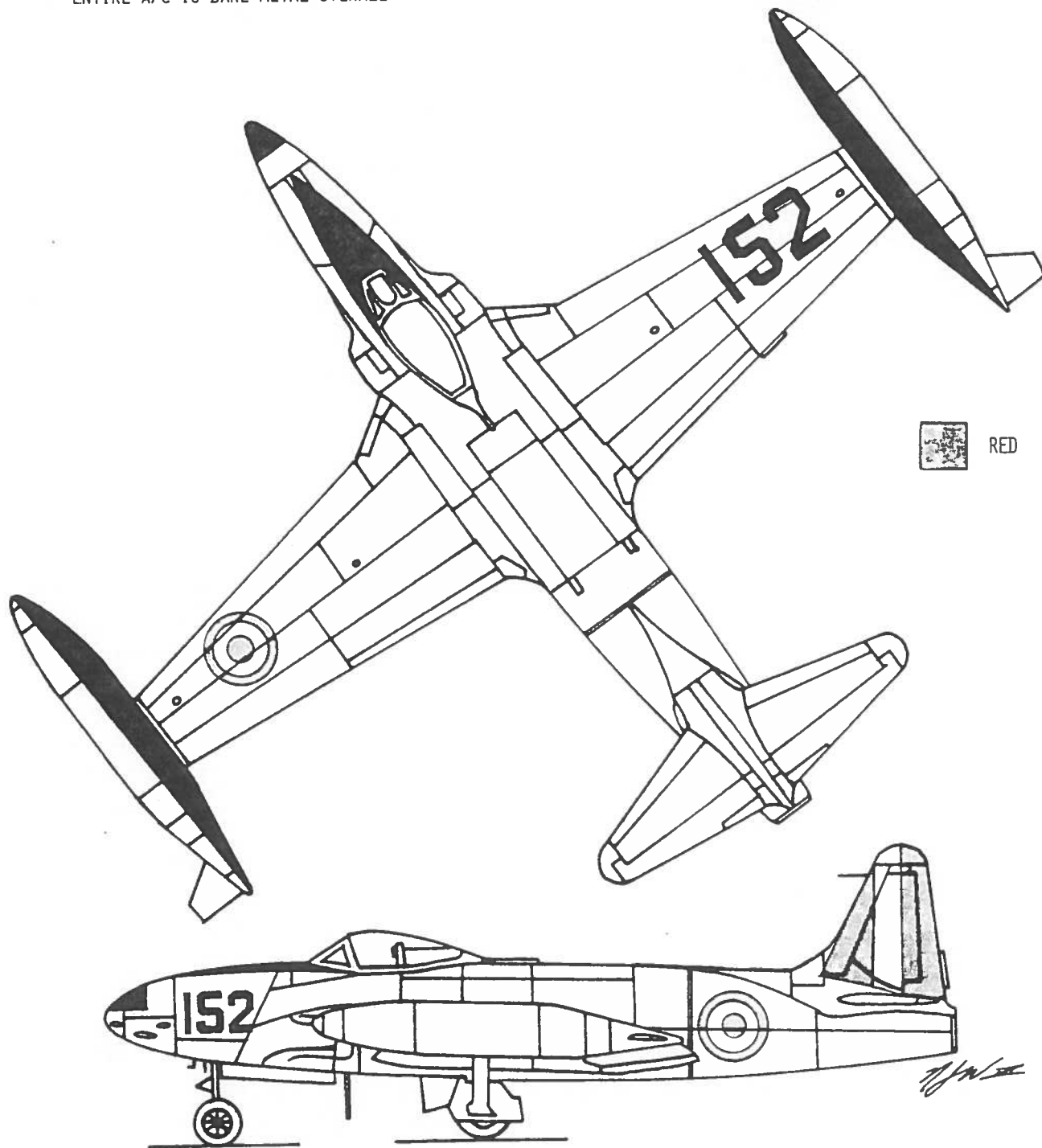


LOCKHEED F-80C

PERU



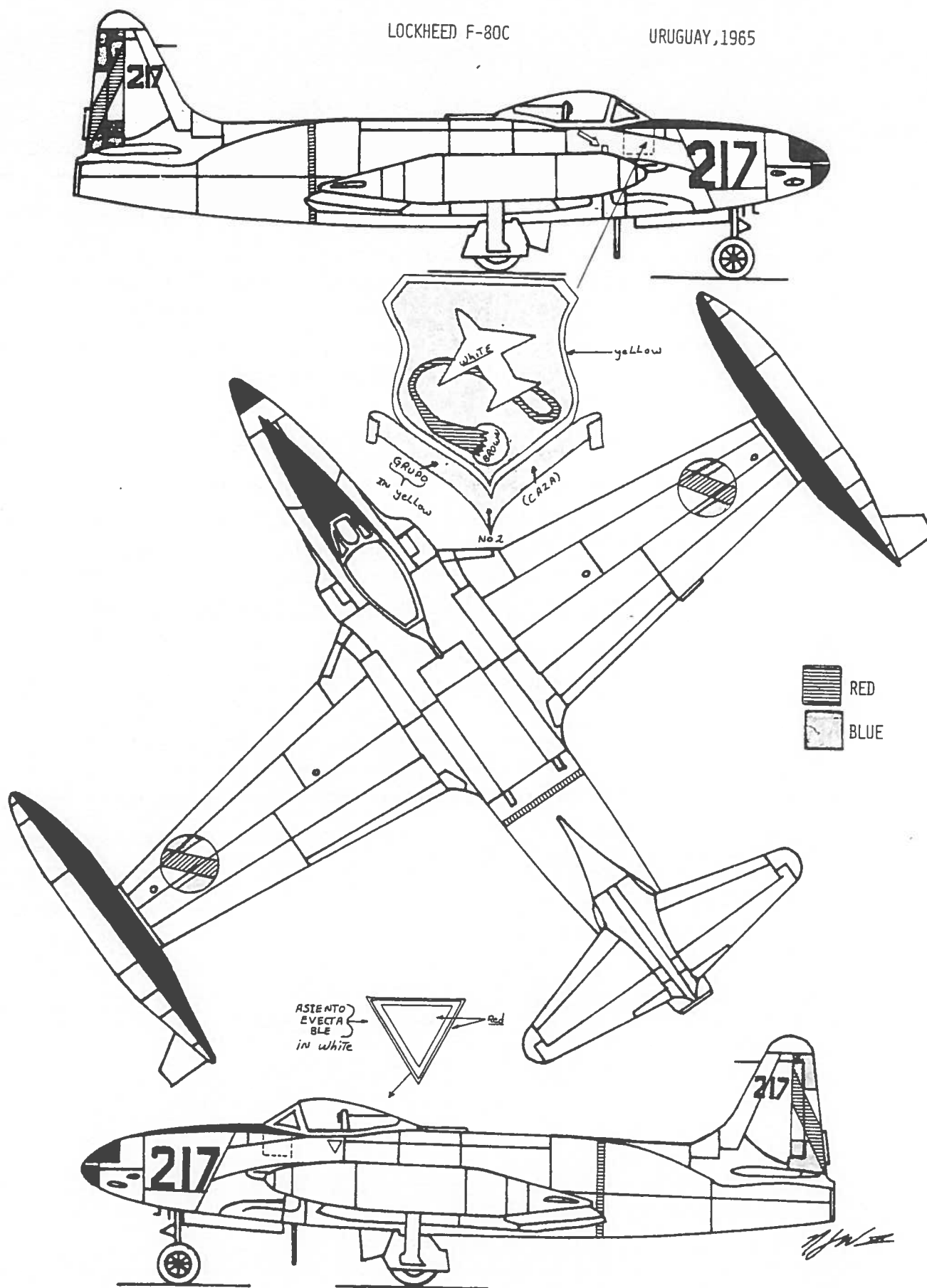
ENTIRE A/C IS BARE METAL OVERALL



RED

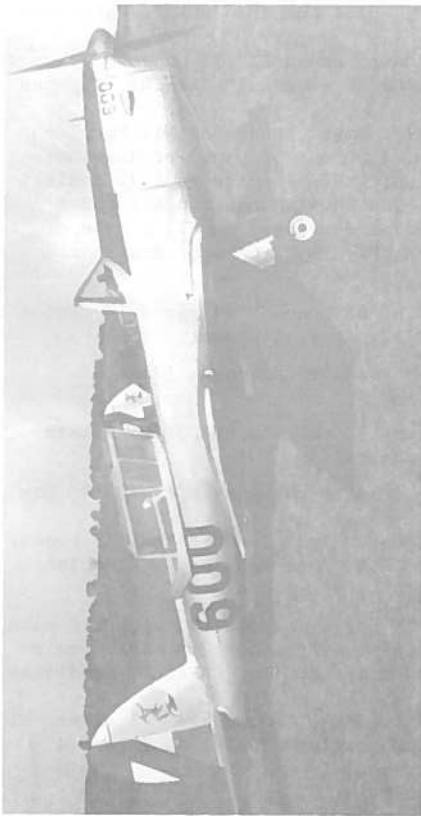
LOCKHEED F-80C

URUGUAY, 1965



# Military Aircraft of Uruguay

Photos via Gary Kuhn



2



4



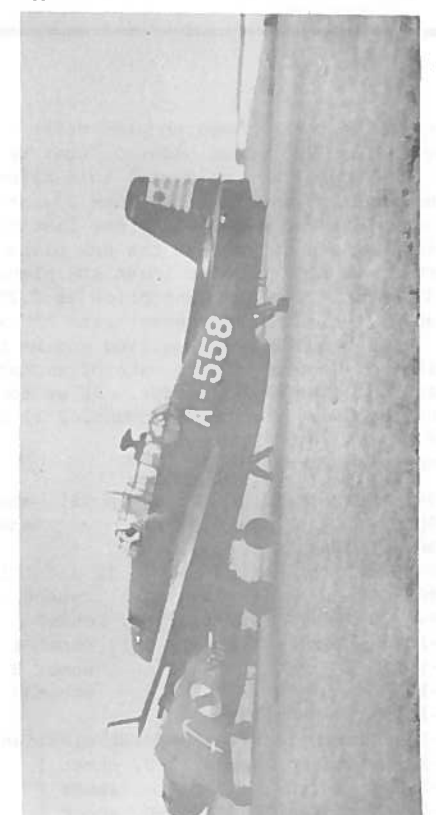
6



1



3



5

AVIATION SOCIETY OF AFRICA NEWSLETTER (Please note new address: PO Box 1413, Alberton, 1450, South Africa.)

Feb. '78 (24 pages). Photos: L-1049G 5N-83H, Islander 5T-AFU, Niger A/F Noratlas, Do-28 CQ-ANV. Insignia (11) Ethiopia.

Mar. '78 (24 pages). Photos: Egyptian A/F An-12 SU-AOR, Cessna 177 7Q-YCK, Islander ZS-ORD, Mocambique Noratlas C9-ARK, Air Rhodesia Boeing 720 VP-YNM. Insignia (12) Ghana.

June '78 (28 pages). Photos: Convair 580 ZS-KEI, MS880 CN-TUW, Air Malawi BAC 111 7Q-YKE, Chieftain ZS-JGL, Morocco T-34C, Twin Comanche 3D-ACI, Cessna 140 3D-ACG. "Aerial War over the Ogaden 1977-1978". Insignia (13) Kenya.

July '78 (24 pages). Photos: Libian A/F AB-206 '8185', Air Ivoire F-27 TU-TIA, Do-27 CR-GAQ, Super Cub EL-AII, Air Rhodesia Viscout VP-YNB, King Air ZS-KAA. Insignia (14) Botswana.

Aug. '78 (28 pages). Photos: Ivory Coast A/F Cessna 337 TU-VAH, DC-3 5Y-BBN, Air Malawi BAC 111 7Q-YKF, Nigerian A/F Bulldog, Senegalese A/F F.27, Nigeria A/W Boeing 727 5N-ANQ, Boeing 737 C9-BAB. "The War in Shaba - An Account of the Role of Aviation".

Sept. '78 (24 pages). Photos: Guinea Twin Otter 3X-GAY, Aero Commander A2-2FX, Kenya Cessna 402 5Y-BBV, Iranian Boeing 727 EP-SHP, DC-3 ZS-EJK, SAAF Shackleton '1717', Chieftain ZS-KBY, DC-3 9Q-CIT. "The Air Forces of East Africa - Kenya, Tanzania, & Uganda".

IPMS-BELGIUM KIT (Nothing received since #28.)

IPMS-AUSTRALASIA (Nothing received since #2/3 '77.)

IPMS-NEDERLANDS (Nothing received since #1 '78.)

O.F.H. NACHRICHTEN

2/78 (31 pages). "Austrian DC-3" (3 pages of text, 1 photo, 2 pages of drawings of civil a/c). "Austrian LT-6G Texan" (2 pages of text, 1 photo, 4 pages of drawings). "Austrian Gotha Go 145B" (2 pages of drawings, 4 photos). "OE- Kennzeichen bei Militarmaschinen - 1938" (3 pages of text). "OE Registrations AAI to STA" (5 pages). "Austrian SAAB J-29" (4 photos).

IPMS-FINLAND (Nothing received since #25/26.)

IPMS-NORWAY (Nothing received since #3 '77.)

IPMS-CANADA RANDOM THOUGHTS

Oct/Nov '77 (24 pages). "The Fawn in the RCAF" (13 pages, 8 photos, 1 3-view, 25 side views). "CF104" (drawings of new variegated camouflage).

Dec. '77 (20 pages). "Fleet Finch" (11 pages, 9 photos, 1 3-view, 14 side views). "162 Squadron RCAF" (Catalinas 6 pages, 15 photos).

Jan. '78 (12 pages). "Avro Anson II" (3 pages, 6 photos). "The Royal Hungarian Air Force - Part 1" (Bf-109, 3 pages of drawings).

Feb. '78 (12 pages). "The Royal Hungarian Air Force - Part 2" (Me-210, 5 pages, 4 photos, 2 pages of drawings; CR-42, 2 pages of drawings; WM 23, 3-view in 1/72 scale).

Mar. '78 (12 pages). "The Royal Hungarian Air Force - Part 3" (Re 2000, 2 pages of drawings; Ju 87, 1 page of text, 2 pages of drawings; FW 190, 1 page of drawings).

FLYVEHISTORISK TIDSSKRIFT

#2 '78 (12 pages). "D.H. 84 Dragon" (4 pages, 7 photos). "Fairchild Argus OY-EAZ" (2 pages, 1 photo).

IPMS-SWITZERLAND (Nothing received since #1 '78.)

MILITARY JOURNAL

Vol. 2, No. 1 (48 pages). "Armor on the Slovak State 1939-1945" (5 pages, 20 photos).

MODEL-AIRE INTERNATIONAL (Please note new address: PO Box 159, Olema, CA 94950.)

Vol. 2, No. 10 (24 pages). "Israeli Ouragans" (4 pages, 7 side views). Drawings of Afghanistan DH-(A, Albanian F.6 (MiG-19) & IL-14).

IPMS-UK MAGAZINE (\$7.00 US for 6 issues. IMO or check with "sufficient extra money to cover the cost of bank commission" to IPMS/UK, 48 Brookside Gardens, ENFIELD, Middlesex, UK.)

July/Aug '78 (16 pages). "A-10 Camouflage" (5 pages, 11 photos, 1 drawing). "USN Camouflage 1941-1945 - Part 4" (2 pages, 1 page of drawings).

IPMS-WASHINGTON DC PRI FLY (\$.50 US & Canada, \$5.50 all other countries for 4 issues. To Barbara Knizner, 5001 Seminary Rd., Alexandria, VA 22311.)

#27 (14 pages). "Export C-130s in the Americas - Part 2" (2 pages, 1 page of drawings).

## SWEDISH PLANS

The response to the Swedish plan offer in SAFO #8 was so enthusiastic (265 plans ordered) that we are going to repeat the offer. Not only will this allow those of you who missed out the first time to take advantage of the 50% discount, but those who did order last time can now order any they missed as well as the new plans now available. Remember, we must have at least 100 plans on order to get the discount. The discount price is 2.25 Swedish Kronor per sheet, which at the present rate of exchange comes to 53¢. Please add 20% for mailing and be prepared to be credited or debited if the rate of exchange varies between now and the time of our order. If we don't get the 100 orders necessary for the discount, I'll order half your plans at the retail price.

The new plans are:

394 Beechcraft 18 (Tp 4, Tp 45), sheet 1  
395 " " sheet 2  
396 Thulin "G"  
397 Heinkel He-114 B-1 (S 12 sheet 1  
398 " " sheet 2  
399 Ryan NYP "Sprit of St. Louis"  
3-100 Fokker F-VIII, (Tp 10), sheet 1  
3-101 " " sheet 2  
3-102 " " sheet 3  
3-103 Maimmer-Kjellson J 23  
3-104 Fairchild F-24, Swedish civilian  
3-105 Northrop "Gamma" 2-D, sheet 1  
3-106 " " sheet 2  
3-107 Northrop "Delta" 1-D, sheet 1  
3-108 " " sheet 2

3-109 ZK-II Sport  
3-110 FVM Albatross "160" (O 2)  
3-111 Hansa-Brandenburg, Type "42", (S 3), sheet 1  
3-112 " " sheet 2  
3-113 Fokker C.V.E/H (S 6H), sheet 1  
3-114 " " sheet 2  
3-115 Fokker C.V.D. (J 3-J 3A - S 6A)  
3-116 Triplanet (Swedish three-decker)  
511 North American Harvard, sheet 1  
512 " " sheet 2  
513 Lockheed T-33A, sheet 1  
514 " " sheet 2  
515 Northrop N-3 PB, sheet 1  
516 " " sheet 2  
517 " " sheet 3  
518 De Havilland DHC-3 "Otter", sheet 1  
519 " " sheet 2  
520 T-1, Kjeller trainer, sheet 1  
521 " " sheet 2  
522 General Dynamics F-16, sheet 1  
523 " " sheet 2

(The 300 series are by Bjorn Karlstrom and are all of Swedish a/c. The 500 series are by Tom Arheims and feature Norwegian a/c.) A list of all earlier plans appeared in SAFO #8; if you don't have a copy of this issue, send 25¢ (or 2 IRCs) for copying and postage costs and I'll send the list to you.

LOCKHEED HERCULES: PRODUCTION LIST 1955-1977, 2nd Edition. By Lars Olausson. 68 pages, 14.7 by 21.1 cm (5 3/4 by 8 1/4 inch). Sw Cr 12.00. Box 32, S-53032 Sätenas, Sweden.

It is not easy to keep records on an aircraft as ubiquitous as the Lockheed Hercules (over 1500 machines delivered to some 43 governments 21 commercial operators). It is even harder to present this information in an understandable and useful manner. Lars Olausson (SAFCH #361) has accomplished these Herculean tasks in a most commendable fashion.

This book is much more than its title suggests. While the longest section (29 pages) is titled 'Production List', much more than a mere listing of c/n's is to be found under the headings: LAC c/n, Model, To, Registr, & Remarks. As an example, LAC c/n 4450, Model 282E-270 L-100-20, To Fuerza Aerea Peruana, Registr OB-R-956, Remarks FAP-396. SATCO. Damaged take-off Iquitas 73.06.02. (Lars uses the new international convention for dates; 73.06.02 means 2 June 1973.) Supplementing and complimenting this list are sections on: USN, USMC C-130 Operating Units; USAF Operating Units; USAF Tailcodes of C-130 Operating Units; USAF Serial Numbers; USCG, USN, USMC Serial Numbers; Owners, Governments; Owners, Commercial; Versions A, B, E, H and L-100 Models. The 39 half-page size photos give a good

sampling of Hercules from a YC-130A to a USAF C-130H.

The 'Versions' section is particularly clever and useful. There are two tables for each subtype. The first lists the 'original versions' with headings: Model; LAC c/n; To; Number; Role and Remarks. The second has the same headings for the 'modified versions'.

My review copy, sent by the author, contained an update of the 'production list' to October 1977.

The small air force enthusiast is well taken care of. The 'Owners, Governments' section lists all LAC c/n's for each country. Knowing the c/n, one can turn to the 'Production list' for details such as previous owners, squadron service, air force registration, etc. For example: LAC c/n 4484, Model 382C-170 C-130H, To IIAF, Registr 5-156, Remarks, renunbered 5-151 (73.11), 5-8545 (1976). Photos of small air force interest are: Columbia 1001, Sweden 84001 as SE-XBT, Zambia 9J-RCY, Pakistan International Airlines AP-AUT, Iran 5-112, Norway 954, Libya 117, Israel 4X-FBB 06, Spain 301-01, Saudia Arabia 102, and Uganda Airlines 5X-UCF.

This booklet gives good value for the money and is a "must" for all Herkey Bird lovers, and is highly recommended to all small air force enthusiasts interested in information on aircraft widely used by the smaller air forces of the world.

While the Soviet Air Force is definitely not a 'small' air force, its a/c have been neglected by the manufacturers of scale-model plastic kits. Therefore, the release of three new kits of Russian a/c in 1/72 scale by firms in Eastern Europe should be of great interest to many SAFCH members.

From NOVO in the USSR comes the long-awaited MiG-3. Since this kit is made from the FROG molds, not much need to be said about its quality. It is accurate in scale and outline, with the clean surface detail characteristic of FROG and quite appropriate for a wooden-covered a/c. It should make into a nice model straight from the box, while still leaving enough to do for those who go in for detailing. The decal sheet and instructions were missing from my kit, so I can't comment on these.

The two latest releases from VEB in East Germany are both in 1/72 scale - the first since their An-2 of many years ago. The first new kit is of the Tu-2 twin-engine bomber. It is right on scale and accurate in outline. However, the details remain typical VEB and leave much to be desired. The most serious problem is the shape of the engine nacelles; these will have to be rebuilt entirely from scratch. Clear and finely-scribed transparencies are a good point for the kit, but all crew positions are closed off along a line that runs along their inner edges. These will have to be cut open and, because of the large area of transparencies, interior detail added. Excellent interior and exterior details can be found in the PLANY MODELARSKIE sheets for the Tu-2 and this set is a must for anyone wishing to do an acceptable model from this kit. An article in L+K (#1 1978) reviewing this kit points out several additional errors in the kit; some of which can be simply fixed, such as the positions of the side windows, while other require major work such as the canopy which should be built up above the line of the upper fuselage.

All in all, a difficult kit and one that will require much work. A real pity too, since this one can be finished in the markings of several 'small' air forces: Poland, Hungary, Bulgaria, and China. My advise is to get one as insurance, but pray for a kit from either AIRFIX or MATCHBOX. If this happens, you can use the VEB kit to make a two-seat version.

The second kit from VEB is a different story. While there is some improvement in quality, the main attraction is that it is of a subject that we are not likely to see from any other manufacturer - the Be-6 post-war, twin piston-engine flying boat. Once again the kit is on scale and the outline looks good, but again there are difficulties with the details. The engine cowls need extensive work; an intake must be added to the upper lip, new exhaust stacks made and put into the proper position. Also, the nacelles need intakes on the bottom and outlets on the top. The struts for the wing floats need to be thinned and shaped to an airfoil section. Good clear parts are provided, but again the pilot's compartment must be cut open and interior detail added. The only serious problem is with the cockpit canopy; it lacks the overhang of the original and must be replaced by one built from scratch. These comments are based on photos from various publications and an excellent 3-view scale drawing in L+K #15 1974. The kit comes with a tail gun, but conversion to an ASW version with MAD stinger should be simple. This kit is highly recommended and will make into a nice companion for a Martin Mariner (if we ever get one).

The instruction sheets for both VEB kits are useless, but detailed instructions are not necessary considering the small number of parts in these kits. The decals are rudimentary, providing red stars and numbers; they will probably be discarded by most modelers.

From Dave Menard (SAFCH #16) came a list of photos available at the AAVS that may be of interest to SAFCH members:

108589AF	four Thai F-84Gs in formation
151031AC	four Norwegian F-84Gs in formation
61243AC	Mexican AF P-47D being serviced at Clark
108280AF	Chinese F-86F 113318 landing
91392AC	" F-84Gs in formation
88981AC	" F-84G 11082
91620AC	" F-84G
86226AC	" F-47N line up

88964AC	Chinese C-46 landing
85516AC	" T-6G taking off
85519AC	" " "
86448AC	" PT-17 air to air
86445AC	" PB4Y-2 on ground
86446AC	" " air to air
K32555	" F-86F 24545 taxi-ing at Clark
K34158	ROKAF T-33A 61629
K34219	" F-86F 113248

The ones with K prefix are 35mm color slides, @ \$1 each, while the others are B&W, @ \$1.25 each for 8x10 SWG.

# WARBIRDS by Owers

## ESTONIAN de HAVILLAND DH 9

Estonia received 12 DH 9's, the first entering service in 1919, the last crashed in 1933. During this long service career their markings underwent a number of changes. Initially the Estonian national markings were applied over and in addition to the RAF markings; some aircraft carrying Estonian insignia on the fuselage and RAF cockades on the wings. Where wing cockades were painted over and the Estonian insignia applied, the former could usually be seen through the overpainting. RAF camouflage was usually retained. This appeared in two versions: (1) The ply fuselage panels were painted grey. The top and side fabric areas of the fuselage, the fin, and the upper surfaces of the wings and tailplane were painted P.C.10. The fabric underneath the fuselage, and the lower surfaces of the wings and tailplane were left in natural varnish. (2) Later, DH 9's were overpainted one color on all upper surfaces, most probably P.C.10 or dark green.

A/C #16 (RAF H9135) carried RAF as well as Estonian serials. Fuselage insignia had a narrow white outline. Natural metal nose cowl.

A/C #17 (RAF H9133) was same as #16.

A/C #28 (RAF D651)

A/C #29 (RAF ? ) Fuselage insignia and RAF serial.

A/C #30 (RAF D660) carried the fuselage insignia with white outline and RAF serial. Wing cockades were overpainted and the Estonian insignia with narrow white outline marked further inboard. In January 1920, this aircraft left Helsinki, Finland, carrying the first airmail stamps and banknotes of the Estonian Republic. When it reached Lasnamagi aerodrome, the ground was hidden by mist and attempting to land the de Havilland hit a wall and crashed. Both crew escaped injury and the treasure bags of notes and stamps were salvaged.

A/C #31 (RAF H9157). As for #30, but in 1926 it appeared with the fuselage insignia and RAF serial removed.

A/C #32 (RAF D9837). As for #30. About 1930 the serial was remarked in a different style.

A/C #67 to #71. These aircraft carried no fuselage markings or RAF serials.

## NETHERLANDS de HAVILLAND DH 9

The Netherlands acquired 16 DH 9's during the Great War. Aircraft which could not make the Allied lines after raids into Germany would divert to neutral Dutch territory where they would be interned. By late 1918, the L.V.A. had so many aircraft that it formed a unit to

operate the type. It is not clear how many aircraft the L.V.A. made airworthy and which saw Dutch service. For example, D1733 is reported to have had a Dutch serial, whilst D2781 did not, and yet the former was badly damaged when it crashed on arrival, and the later landed normally.

The accompanying drawings show C1211 as it appeared when it was interned. The fuselage was painted overall in P.C.10 finish. The same scheme was applied to B7620. The latter is the only DH 9 whose photograph in L.V.A. markings seems to have survived. This aircraft carried the early orange cockades which were overpainted on the RAF wing cockades, and also marked on the bottom surface of the upper wing, a common practice at this time. The rudder, including the balance portion, was overpainted orange. The fuselage white stripes were modified to that shown and a fuselage cockade applied. The individual letter "A" carried in No. 211 Squadron RAF, was overpainted and the Dutch serial was applied, in white, across here. This read "de H. 433. SP.200". For details of the finish of this aircraft in RAF service, see Profile No. 62 "The de Havilland DH 9" by J. M. Bruce. Note that the Profile painting does not show the uppersurface colour extending to the lower surface of the wings and tailplane. The front two or so inches of these surfaces were so painted.

H-121 depicts the early markings applied to K.N.I.L. DH 9's. Thirty-six of this type were used in the Dutch East Indies (H101-136). This aircraft carried the white "angry cat" insignia of the 1st Vliegtuigafdeling on the red rudder stripe. The position of the various colours in the national insignia varied until about 1930 when it was standardised in the positions in use today. For example, H-122 carried the starboard national insignia on the fuselage with the white portion towards the rear, and the blue portion forward.

The K.N.I.L. also produced 13 locally built modified DH 9's called type HL's. In the case of specially modified aircraft, a suffix was added to the serial: A for ambulance; F for photographic; examples being H-115A, H-117A, H-124F and H-130F.

## REFERENCES:

"Interned in Holland, 1914-18" by G. H. Kamphuis, AIR PICTORIAL, December 1967.

"Interned in Holland", letter from F. Gerdessen, AIR PICTORIAL, February 1962.

Special thanks are due to F. Gerdessen who provided all the material for this article and drawings.

Colin A. Owers (SAFCH #261)

## SINGAPORE A-4's

A-4S	Bu#	142850	a/c#	600	A-4S	Bu#	142131	a/c#	604
A-4S		142832		601	A-4S		144874		605
A-4S		142771		602	A-4S		144980		606
A-4S		142908		603	A-4S		145013		607

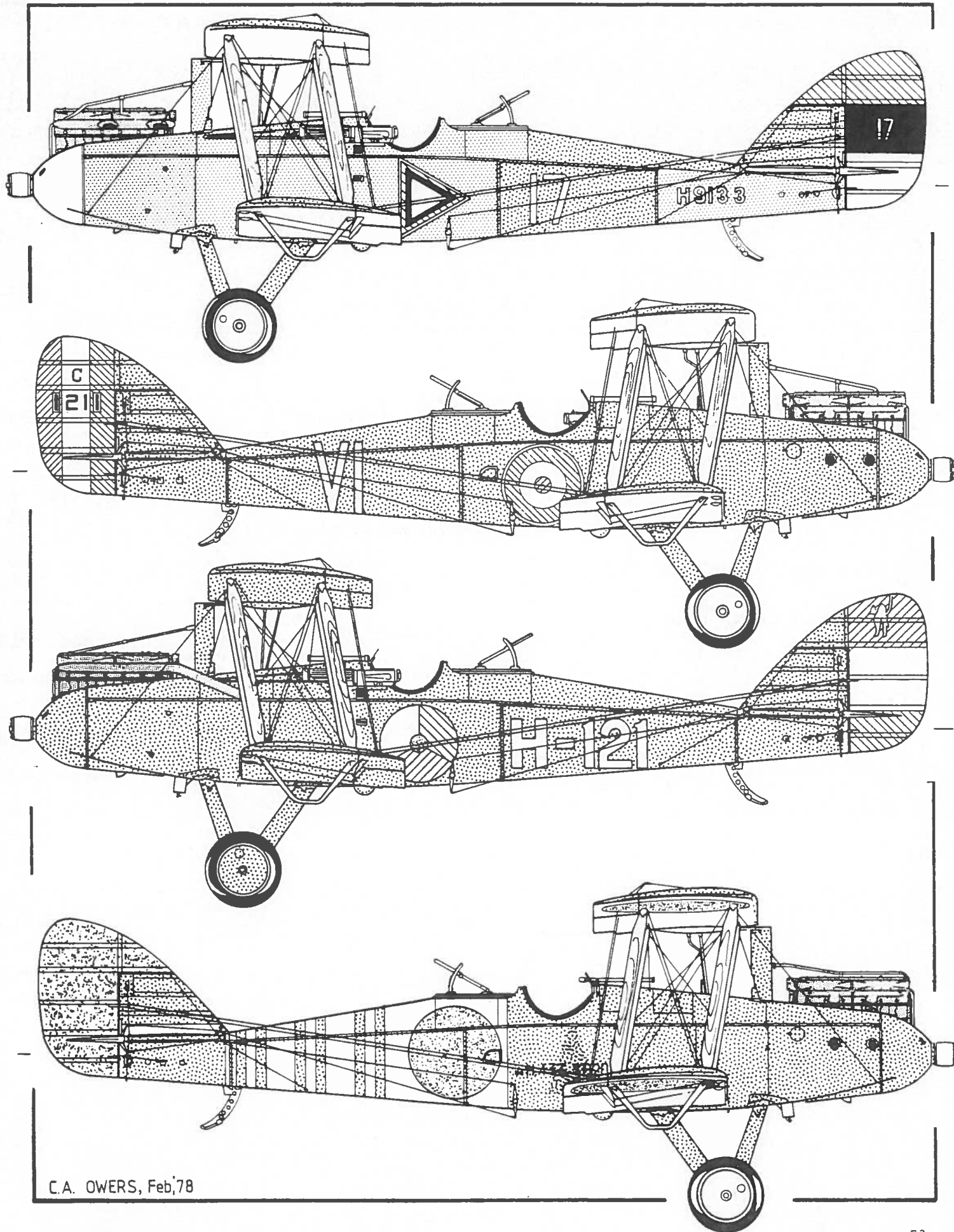
## BRAZILIAN F-5's

X-1001	74-01576	3-6-75	Y-1016	74-01597	10-16-75
X-1002	01577	"	Y-1017	01598	"
X-1003	01578	"	Y-1018	01599	"
X-1004	01579	5-8-75	Y-1019	01600	"
X-1005	01580	"	Y-1020	01601	"

X-1006	01581	"	Y-1021	01602	11-13-75
			Y-1022	01603	"
Y-1001	74-01582	6-12-75	Y-1023	01604	"
Y-1002	01583	"	Y-1024	01605	"
Y-1003	01584	"	Y-1025	01606	12-11-75
Y-1004	01585	7-10-75	Y-1026	01607	"
Y-1005	01586	"	Y-1027	01608	"
Y-1006	01587	"	Y-1028	01609	"
Y-1007	01588	"	Y-1029	01610	1-15-76
Y-1008	01589	8-7-75	Y-1030	01611	"
Y-1009	01590	"	Y-1031	01612	"
Y-1010	01591	"	Y-1032	01613	"
Y-1011	01592	"	Y-1033	01614	2-12-76
Y-1012	01593	9-11-75	Y-1034	01615	"
Y-1013	01594	"	Y-1035	01616	"
Y-1014	01595	"	Y-1036	01617	"
Y-1015	01596	"			

Date indicates departure from Williams Air Force Base.





C.A. OWERS, Feb, '78

"This is just a letter with some things that you or someone at the SAFCH may be interested in.

"In the Dec. 5, 1977 issue of Time magazine there is a color photo of an early model Israeli Kfir. This particular aircraft, #705, is noteworthy because of its yellow and black diamond checked rudder. Other photos of Kfirs with colored rudders have always shown the red and white diagonal stripes of what is presumably #101 squadron, so this would 'seem' to be the first photo of an Israeli Kfir that belongs to a squadron other than #101. I use the word 'seem' because Newsweek, in its Periscope section, stated that the Israeli used Kfirs with fake squadron colors to escort President Sadat's plane. Who knows, maybe the photo is a dodge, or maybe the Israeli Kfir squadrons are starting to paint their rudders in distinctive colors.

"In the March '78 issue of the Italian publication, Aviation and Marine, there is a color photo of an Egyptian Mirage flying overhead during the October 6 parade in Cairo in 1977. The interesting thing is that this Mirage has yellow I.D. panels on the wings like the Israeli Mirages and Kfirs. At first I thought that this would make for some confusion in case of a future conflict with Israel until I remembered that Egypt had had a border skirmish with likewise Mirage-equipped Libya that July. So I guess these I.D. panels must be more intended to distinguish the Egyptian Mirages from the Libyan ones than from those of Israel. I also wonder if there are any marking differences between the MiG-23s that are used by these two countries?

"On the back cover of a special edition of Life magazine in 1973 commemorating the 25th anniversary of the existence of Israel as a state, there is a color photo of a formation of Phantoms. The interesting thing is the presence of a red chevron on the tail of Phantom #114 which is similar to the red chevrons on the Mirages of the 'Winged Bat' squadron, a color photo of which is shown in the Hadar-Ofer book on the Israeli Air Force, p.166-7. The 'Winged Bat' can be discerned on the tails of the Mirages and a close-up of this same insignia can be found in this same book on p.48-9, although this time it is on a flight jacket and on a de Havilland Mosquito. The point I'm trying to make is the connection of the red chevron with the 'Winged Bat' insignia. Since none of the other F-4's carry the red chevron, I could be totally wrong about this, but it is something to go on. Another color photo of this same formation, taken from a slightly different angle can be found in Bill Gunston's F-4 Phantom p.64.

"Despite their participation in aerial combat since 1970 in Israeli Air Force service, I have found only two photos of Israeli F-4's with victory markings. One, #172 with one victory tally, can be found on page 13 in the Sept. 22, 1975 issue of Aviation Week and the other, no number, is in Fighter Aces by Chris Shores p. 157, also with one victory marking.

"The Egyptian C-130 that picked up the surviving Egyptian commandoes and the bodies of their slain comrades at Nicosia Airport on Cyprus was coded SU-BAF 1727, camouflaged in the same fashion as the first C-130 SU-BAA, p.199 Aviation Week March 21, 1977.

"In the January 1969 issue of National Geographic there is an excellent color photo of four Nationalist Chinese F-104G's. The aircraft are uncamouflaged, so this should give to anyone who is interested an idea of what the Nationalist Starfighters that tangled with Communist MiG-19's in 1967 looked like.

"In the June 27, 1977 issue of Time magazine there is a good black and white photo of a Norwegian F-104G flying formation with a Soviet Tu-16. The F-104 is from 331 squadron, coded FN-R with the R repeated on the tail, and the Tu-16 has a small white 86 or 96 on its tail.

"In the April 25, 1977 issue of Newsweek there is a good color photo of the new Zairean insignia. It consists of a yellow circle surrounded by a band of medium green. Inside the yellow circle there is an arm holding a torch with a red flame. The insignia appears to be on a C-130 or on a Transall.

"Now I have some Xeroxed information about several kinds of MiGs, some of which may be new to you:

"MiG-15 #241 flown to South Korea by a defecting North Korean in 1960. The ROK F-86 alongside has the serial number 55029. The MiG appears to have a black wingwalk at the wing root.

"Two copies of color photos of Albanian MiG-17s. All the MiGs are natural metal with the Albanian star on their tails. The two MiGs taking off are numbered 215 and 234, the numbers being red with white outlines. There is no evidence of any under-wing insignia. The second photo shows three MiGs in flight. Again, they are natural metal and appear to have an insignia on their left upper wings. There may be an insignia on the under surfaces of these aircraft, and probably is, but I can't see it on the original photograph.

"The only photo, drawing, profile, etc., I have ever come across of a combat aircraft of Somalia. This is a copy of a photo that originally appeared in the August 17, 1977 edition of the New York Times. Although the caption identifies the photo as being the wreckage of a MiG-21, it is in fact the remains of the aft section of a MiG-17. This MiG is camouflaged, but I can't tell the colors or the pattern. The Somali insignia, a white star in a light blue circle, is on the tail in about the same place as on the Albanian MiGs and below the insignia, at the base of the tail, is the aircraft's identifying number - CD 151. The Daily News said that this MiG had shot down a DC-3 moments before it too was knocked down.

"A copy of pages 126-7 of Malcolm Browne's The New Face of War stating that North Vietnamese ace, Nguyen Van Bay flew MiG-17 #2019. The only photo I have of this aircraft is from an issue of Koku Fan, which also had color pictures of MiG-17 #3020 and MiG-21 #4326. This photo is probably the one from which the profile in the Seattle IPMS Quarterly was made, as reported by Ted Koppel in SAFO #7.

"A North Vietnamese MiG-21 with 14 victory stars on its nose. The photo is from News of the Week in Review section of the Sunday New York Times in the spring or early summer 1975 after the fall of South Vietnam. The only other N.V. MiG-21 I have seen with victory marks is #4326 which had thirteen. Whereas #4326 had its 13 red stars arranged in two rows of five stars each with the remaining three stars aligned with the middle three stars of the two rows below them, the MiG-21 in the Times (#4224?) has its 14 victory stars arranged also in two rows of 5 stars each but has the remaining 4 stars below the two 5 columns and they are aligned with the four spaces between the five stars.

"Two photos of a downed Syrian MiG-21 that appeared in the Sept. '73 issues of Newsweek and Time. This is one of thirteen MiG-21's claimed shot down over Syria during a massive dog fight on the eve of the Yom Kippur War. It was the only MiG that did not end up in the Mediterranean Sea that day. Although more detailed photos and drawings of Syrian aircraft are now available, this photo illustrates the worth of monitoring the daily and weekly news publications because this is the first indication that I (a humble aircraft marking affectienado) had that Syria had changed its national markings, that is, the presence of a new flag on the tail instead of the old three-starred one. This fact did not appear in any of the modeling or aviation magazines until way after the conclusion of the October War. I realize that these specialist magazines do not have the resources of the national and big city giants, but I want to show that anyone interested in aircraft, especially contemporary ones, does not have to limit himself to aviation magazines, but he can find information from many sources, among them weekly news magazines, daily newspaper, T.V. newscasts, and model kit instructions.

"A photo of a flight of Cuban MiG-21's. The flight consists of five MiG-21J's and two MiG-21UTI's. All the MiGs are uncamouflaged with only MiG-21J's #514, 512, and 519 being identifiable.

"A photo and report of a Bulgarian MiG-17 that crashed in Italy in 1962. The report first appeared in the Jan. 29, 1962 issue of Aviation Week with a photo of the MiG, #22, appearing the following week in the Feb. 5, 1962 issue.



"A photo of an Ugandan Fouga Magister U-105. Because this aircraft was supplied to Uganda by Israel when relations between the two countries were still good, and because of the similarity in style of the day-glo markings on the nose and tail of this Ugandan FM and that of Israeli FM's, one is led to believe that this Ugandan FM is camouflaged in Israeli fashion, probably in the brown/blue-gray scheme. I have come to this conclusion because of a profile of a Ugandan L-29 Delfin that appeared in an issue of Letectvi + Kosmonautika. This Delfin also has Israeli style day-glo markings on its nose, tail, and wing tips and is painted in a brown/blue-gray scheme with the number U-107 on the nose.

"A series of articles concerning a group of Soviet MiGs reportedly in USAF service. In the September 1977 issue of Armed Forces Journal there appeared an article stating that the Air Force does now indeed possess as many as 20-25 Migs of various types. One MiG that probably flew, however briefly, with this 'MiG Squadron' was a Cuban MiG-17 #232 which was flown into Homestead AFB in Florida in 1969. I reached this conclusion because of a color photo that appeared in the Dec. 1972 issue of Air Enthusiast showing this particular MiG in flight. While possibly of Cuban origin, the photo was probably taken during an Air Force evaluation of this MiG, especially since the MiG was already at an Air Force base and because Air Enthusiast has a better chance of getting aircraft photos from the USAF than from the Cuban Air Force. Other photos of this MiG have appeared in various issues of Air Force magazine, one showing the MiG taxiing with a ground crew member sitting on either wing, and another showing this plane inside a hanger. I am also enclosing two reports from the Agence France Presse wire service of MiG-21's given to the U.S., one from Israel, and one originally from Uganda. I am also sending color schemes of various MiG-21's, including one of an Ugandan MiG-21, which I copied from, of all places, a Hasegawa model kit instruction sheet. Incidentally, the Ugandan MiG is depicted as being in a brown/blue-gray scheme which would support my suspicions as to the camouflage of the Ugandan FM that I mentioned earlier. Furthermore, at the time that this 'MiG Squadron' first received any publicity, in the autumn of 1977, there appeared a novel, Firefox by Craig Thomas, which was about the efforts of a group of British and Americans who attempted to steal Russia's newest and hottest fighter, the MiG-31 Firefox. In it, there was one character, a Vietnam War veteran and former test pilot, who was also a member of the Air Force's 'Secret Squadron' of genuine MiG fighter planes which included an exact copy of Victor Belenko's MiG-25! While not the best novel in the world, it does make for some interesting reading.

"In the March 13, 1978 issue of Aviation Week there is an excellent full color photo of a trio of T-34C's, including one for Morocco, one for Ecuador, and one for the Peruvian Navy.

"The recent aircraft defections (Belenko's MiG-25 to Japan and the An-2 to Iran in Sept. '76 and a Red Chinese MiG-19 to Taiwan the following July) have set me to thinking about the many aircraft that have changed sides for one reason or another since World War II. I know of several, and I am passing this information along to you to, perhaps, stimulate interest in this subject and maybe someone might do an article on it someday. I believe this subject to have merit because of the many kinds of aircraft involved, along with their many color schemes, and it hasn't been attempted before. What follows is just a partial list and is just intended to get the ball rolling.

"Korea: Il-2 Stormovik of the North Korean Air Force captured at an airfield by American ground troops. MiG-15 discovered in shallow water off the coast of Korea early in the war. MiG-15 flown by Kim Suk No after the war. MiG-15 flown to South Korea in 1960.

"China and Taiwan: Nationalist F-47 (#233 with blue and white striped rudder) flown to the mainland on May 18, 1955. Nationalist civilian aircraft (Cessna?) B-1751 flown to the mainland on Jan. 7, 1956. MiG-15 crash landed on Taiwan on Jan. 12, 1960. An-2 flown to Taiwan on Jan. 23, 1962. MiG-15 flown to Taiwan on March 3, 1962. Nationalist F-86 (6272) flown to the mainland on June 2, 1963. Il-28 (#0195) flown to Taiwan on Nov. 11, 1965. Nationalist T-33 flown to the mainland during the mid-60's.

MiG-19 flown to Taiwan on July 7, 1976.

"Middle East: Egyptian Spitfire shot down by Israelis and pressed into service as their first fighter aircraft along other Egyptian Spitfires captured later in the Sinai. MiG-15 shot down practically intact by Israeli fighter aircraft, probably restored to flying status and is now a gate guardian. Yak trainer flown to Israel from Egypt during the mid-60's. Iraqi MiG-21F flown to Israel in 1966. Several Algerian MiG-21's captured by Israelis during the Six Day War. Egyptian Su-7 shot down in the Sinai in the late 60's by the Israelis and restored to flying status. Two Syrian MiG-17's flown to Israel in the late 60's. At least one Syrian MiG-23 flown to Iraq during the mid 70's after an assassination attempt on President Assad.

"India-Pakistan: Indian Gnat (IE 1083) forced to land at a Pakistani airbase by two PAK F-86's on Sept. 3, 1965. Several PAF aircraft flown from East Pakistan to India in late 1971 by Bengali personnel shortly before the war that December.

"Western Hemisphere: Cuban An-2 flown to Miami during the summer of 1962. Cuban MiG-17 flown to Florida in 1969.

"Europe: Polish MiG-15's flown to Denmark in 1953 on two different occasions, the number of the first MiG is 346. Bulgarian MiG-17 crash landed in Italy in 1962. Soviet MiG-17 crash landed in West Germany during the 60's. (I'm sure there are lots more instances of Soviet and Warsaw Pact aircraft defecting to the West, but this is all that I can come up with at this time.

"Africa: Various Ugandan aircraft, including MiG-21's, flown out of that country during the early 70's. Two Ethiopian F-5's flown to either Kenya or Sudan in 1977.

"This is all I have on this subject and I hope that someone might eventually put this all together someday.

"The January 1977 (#86) issue of the French aviation magazine Le Fanatique de l'Aviation has an excellent article on the use of the A-1 Skyraider in the Armee de l'Air. It is a ten page article with two pages of color profiles, two pages of color photos, two pages of 1/72 scale plans, and numerous black and white photos. As a bonus, there is a color painting of a Skyraider taking-off on the front cover. For those interested in combat aircraft, most of the profiles deal with French Skyraiders that were in Algeria in 1960-1 and in Chad in 1973-4. There is also a profile of a U.S. A-1 in Vietnam and one of a South Vietnamese mount, both circa 1967. Modeldecals of Great Britain has recently issued some markings for French Skyraiders, and although I have not seen them yet, they may include some of the A-1's in this article. If not, they should provide the raw materials for modeling these aircraft.

"In the latest issue of Air International (May 1978) there is a mini-review of a new book published by Scarecrow Press which also publishes Aircraft, Engines, and Airmen. It is entitled Index of Model Periodicals 1971 through Covering some 27 magazines dealing with aircraft, automobiles, figures, railroads, spacecraft, etc., it is of limited value to SAFCH members, especially at its quoted price of 23.35 pounds! Anyway, I'd figured I'd let you know about it in case anyone's interested.

"Going back to that Egyptian Mirage I mentioned earlier, I'm sending a copy of a much larger photo of this same Mirage along with a copy of a photo of a flight of four similarly-marked Mirages. Both copies were taken from the Egyptian magazine Al Massawar. As can be seen, the Egyptian Mirages differ from their Israeli counterparts in that their I.D. panels are more of a right triangle shape with the Israelis opting for more of an equilateral triangle scheme. The copy of the solitary Mirage was from a color photo, while the copy of the flight of Mirages was originally black and white. From the color photo, the undersides of the Mirages is painted a light blue, with the electronics pack colored white, and the area aft of the wing by the tail cone solid black. The speed brakes are the standard Dassault red with yellow outline. The uppersurface colors of sand, olive green, and slate gray can be determined from color profiles of Egyptian and Libyan Mirages in the June and July 1977 issues of Air International. A color photo of an Egyptian Mirage appears in the September issue of the same magazine. All the Egyptian Mirages carry the legend "Mirage 55DE" on the nose.

Unfortunately, I am unable to determine any individual aircraft numbers on any of the planes. The photo of the Egyptian Mirage in the Sept. Air International shows the aircraft with roundels something like the WW II British marking. That is, the interior colored circle, black in the Egyptian case, is larger than would normally be the case. This seems to be an early form of positive I.D. from Israeli Mirages. The border conflict with Libya in the summer of 1977 changed all this. The Egyptians seem to have gone back to regular sized roundels, although at least two of the Mirages in the flight of four seem to have yet to be repainted with the current roundels. I base this conclusion of the EAF Mirages with their equal colored cockades on the fact that the close-up of the solitary Mirage shows this, and because this photo was taken during the Oct. 6, 1977 parade in Cairo, some 3-4 months after the trouble with Libya. I believe that, if at all possible, the inclusion of a page of profiles perhaps entitled "Middle East Mirages" with the inclusion of one newly marked Egyptian Mirage along with the previously mentioned Israeli Kfir with the yellow-and-black checked rudder, would be in keeping with SAFO's tradition of presenting information on the smaller air forces of the world.

"Well Jim, that's all the information I have right now, and I hope it can be of some value. You have a great publication, and keep up the good work."

*Denis Maloney (SAFCH #307)*

"It is with the deepest regrets that I must inform you that LATIN AMERICAN AVIATION NEWS will no longer be published.

"We unfortunately ran into a Latin American government, namely that of Peru, that recently expressed strong opposition thru diplomatic channels, to having news of its air force published in our magazine, charging that it served as a tool for international espionage. The authorities of this country even went as far as confiscating a story being prepared by our Peruvian correspondents for LAAN #3, concerning that country's flag carrier AERO-PERU, citing that this was a state-owned airline and since the state was run by military, it thus constituted an unauthorized release of military information.

"Clearly, to the mentality of aviation-minded people living in more civilized countries throughout the world, this action represents an unthinkable attitude which is as ludicrous and ridiculous as it sounds, to such a degree that it has infuriated LAAN's owner from Nicaragua to the point where he has ordered the publication halted.

"As editor of this publication, I lamented this decision, as LAAN was catching on especially after our second edition and the large amount of subscriptions proved this even for the small circulation it had. In my opinion this was a very needed publication in an area where relatively little is known about local airlines and great mysteries in aviation circles are yet to be unveiled.

"To all our subscribers, we don't find the words to express our gratitude for their patronage. To all our collaborators we remain indebted for all their cooperation. It might be of interest to all our readers that we will continue to collaborate with JP AIRLINE FLEETS and updates for Latin America will appear regularly in NORTH AMERICAN AVIATION NEWS (Box 72 Malton P.O., Mississauga, Ontario, L4T 3B5 Canada).

"In the future there are also long range plans for starting a photographic service which will make available slides of Latin American airlines and air forces." George Farinas, Editor, Latin American Aviation News, PO Box 592317 AMF, Miami, FL 33159.

(Editor's note: The above "form" letter was received in answer to a request for information about LAAN. The demise of LAAN at such an early age will be lamented by all SAFCH members and I am sure that we all thank Mr. Farinas for his efforts and wish him success in the future. The following personalized footnote to his letter should be of interest to all SAFO readers.)

"P.S. I have filed your address in our files for when the photo service gets underway we can mail you a list of aircraft slides available. We are building stock right now. So far Nicaragua, Panama, and Columbia have been covered in detail. George Farinas."

"PFI (Plane Fotos International) closed its branch shop at 42 Lyndhurst Ave., Whitton, Twickenham, Middx. TW2 6BX, England on 31 Dec. 1977. PFI does exist, however, in their central shop now fully active under following address: PFI, 4 Horton Rd., West Drayton, Middx., UB7 8EA, England, and sell slides, prints, literature, kits, etc. They maintain close cooperation with APN (Aviation Photo News), Mr. Brian Stainer (editor), 56 Tachbrook Rd., Feltham, Middx., TW14 9PB, England, who since post-WW2 is a leading photo and slide publisher. PFI sells many APN products. Both are recommended. Both demand payment at time of order."

*Fritz Braun (SAFCH #220)*

"I was distressed to see Fritz Braun recommending Plane Fotos International as a supplier of aircraft photographs (SAFO #8, pg. 109). Colin Ballantine (P.F.I.) had been most friendly and helpful, even doing extra favors in obtaining certain color slides, for two years (beginning 9/73). But a 11/75 order for b&w prints was never sent; a note from him a year later (12/76) even admitted this! During 1976 I received four lists from him and immediately ordered from each one, enclosing deposit payments to add to previous credit. (As he was dealing in original slides only, on his color lists, there was always chance that some might be sold out.) However, that same 12/76 note from him stated, as once before, that my previous orders would be sent upon receipt of current order. They never were, despite my repeated inquiries.

"The only list I received in 1977, five months after the previous one, was a South American "Special"; I ordered every military slide thereon and included another deposit as one last effort to deal with Mr. Ballantine. I kept ordering because of our initial good dealings for about two years, plus his assurances that the previous orders would be sent. But nothing was. Several months later, in 8/77, I wrote again, begging for some sort of explanation/response. As of this date, 28 May '78, I still have heard nothing.

"Colin Ballantine (of P.F.I.) owes me 11 b&w prints, as well as a selection from over 50 color slides (I told him I'd accept duplicates if any originals sold out) -- or a refund of more than \$20.00 in deposits. LET EVERYONE BE WARNED! (Exact dates & details - Xerox copies of orders & notes are available, if needed.)" *Ted Koppel (SAFCH #118)* (Editor's note: A copy of this letter was sent to Mr. Ballantine asking for his comments. Since no answer has been received, we print this without comment. The reader should make up his own mind. If a reply is received, we will be most pleased to print it.)

"Thought you might like to see the enclosed photos on aircraft of the pre-war Philippine Army Air Corps. The one with the PT-17's and Stinson Reliant was taken at Zablan Field (now Camp Aguinaldo) in 1939 and shows to good effect the olive drab/international orange scheme of these aircraft.

"The other photo, which I think is very exciting, was taken at Zablan Field in 1941 when the P-ZGA's were turned over by the USAAC to the PAAC. As you can see, it still has the markings of the USAAC Pursuit Squadron from whom it was received. Perhaps you could help us out with the colors."

*Albert Anido SAFCH # 4*

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Publishers Central Bureau, 1 Champion Ave., Avenel, NJ 07131  
 AVIATION AND SPACE MUSEUMS OF AMERICA. By J. Allen. 130 Photos. Pictorial survey of 37 collections of aerospace artifacts - from vintage and World War II planes to Apollo mooncraft, incl. Spads, Fokkers, Sopwiths, Jennies, classic fighters and bombers of World War II and the jet age, more. Pub. at \$12.00. \$2.98  
 ARCO-AIRCAM: FINNISH AIR FORCE 1918-1968. Over 200 Photos and illus., 50 in full color. A complete history of the Finnish Air Force to 1968. Pub. at \$2.95. \$1.00  
 ARCO-AIRCAM: Republic F/RF-84F. By R. Wood and E. McDowell. Over 150 Photos and illus., many in Full Color. Complete look, incl. detailed drawings and specs. of these important jet bombers. Pub. at \$2.95. \$1.00  
 ARCO-AIRCAM: CURTISS KITTY HAWK MK. I-IV. Over 200 Photos and illus. Complete history, with drawings and specs. of World War II's superfighter. Pub. at \$2.95. \$1.00

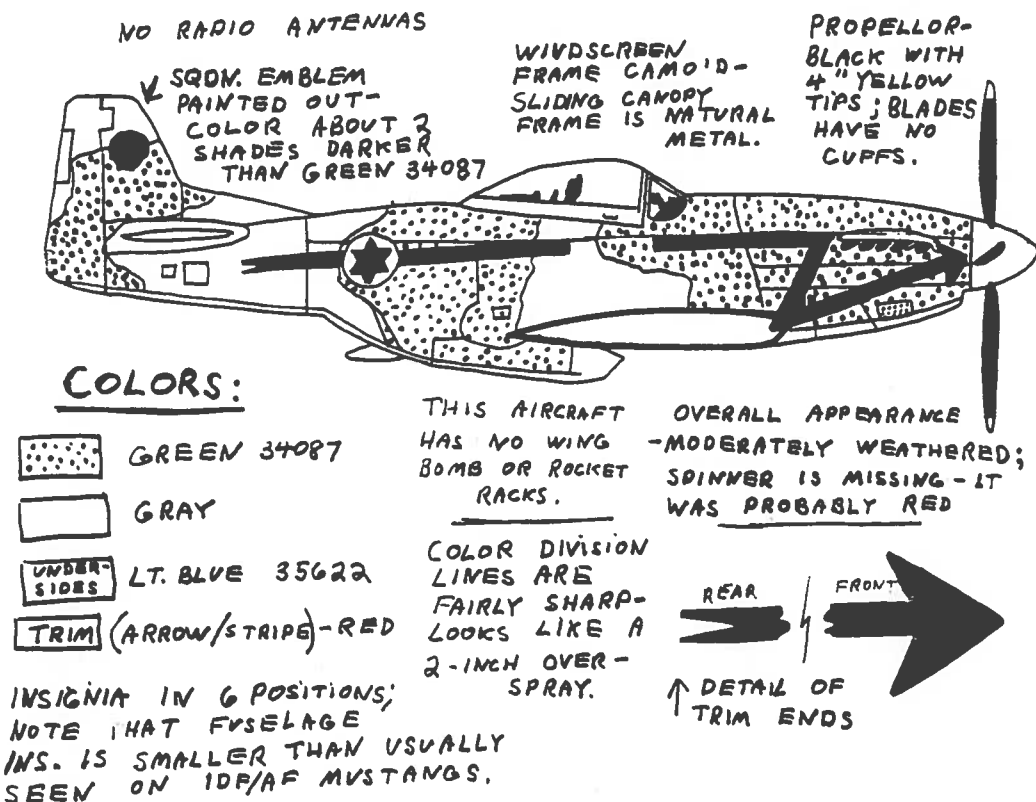
פ-51 מלחמה

ISRAEL, 1976

# P-51 MUSTANG

TOM WISKER

RECOMMENDED KITS: HASEGAWA (1/72) ; MONOGRAM (1/48-NEW)



IDF/AF P-51 MUSTANG

A photograph of this aircraft was published in AIR ASSICS, September 1976. It is interesting as it has side I.D. number, nor is there any trace of one being painted out. This would mean that it was not an operational airplane. She sports the red arrow marking along the length of her fuselage typical of the factory-applied trim on the early French jets operated by the F/AF, the Dassault Mystere IVA and the Super Mystere 2. In fact, my model of this Mustang was marked with the red stripe decals from the AIRFIX kit of the Super Mystere; cut down a bit, of course. This marking, and the lack of any number led me to believe that this Mustang served out her last flying days as a squadron "lack", belonging to a unit flying one of the aforementioned Dassault fighters, or in some other headquarters utility role. It would have been logical to paint the -51 to conform to the trim on the squadron's other aircraft. The P-51s were retired from IDF/AF service in 1962-63 as the first Mirages began to arrive. The older jet fighters were "demoted" to fill the Mustang's ground-attack role with the Mirages providing air cover. There may have been a few surplus Mustangs available for back use. (A number were sold - one that I know of ended its days in southern France wearing a US N-number.) The French-built fighters remained in their original natural-metal finish for some time after the Mustang's retirement - the red arrow marking would still have been in use at that time. Admittedly, this entails a good deal of speculation, but I can not find any other reason for the unusual trim and (more importantly) the absence of the standard identification numbers.

The magazine photo shows the aircraft to be in fairly decent condition for a derelict - no really severe weathering, tires still inflated, fabric rudder covering still intact, etc. A friend of mine thinks it could be a display aircraft but I don't think so, judging from the surroundings. The photo caption says that she's suffering from corrosion problems, also that two Americans are trying to obtain the aircraft for return to this country. Additions, subtractions, corrections, arguments, etc. to Tom Wisker, 20-27 169 St., Whitestone, NY 11357.

The IDF/AF operated a total of 29 P-51Ds. Four arrived by sea from the US in the latter half of 1948, during the War of Independence. Twenty-five more were purchased from the Royal Swedish Air Force in 1952 as that service converted to jets. These were ferried to Israel by RSAF pilots using their own leave time, under agreement with the Swedish Government. All 29 Mustangs were airworthy at the outbreak of the 1956 Suez War (Oct 30, '56). Seven were lost in that conflict, all to Egyptian ground fire while attacking ground targets. The survivors served on into the early 1960s.

Publishers Central Bureau, 1 Champion Ave., Avenel, NJ 0711: HELICOPTERS & AUTOGYROS OF THE WORLD. By P. Lambermont. Scores of Photos & illus. Comprehensive up-to-date catalog of world rotocraft production, past and present. Incl. development, first flights, features and designations, and an exhaustive list of technical data for each machine or project. Enlarged, revised ed. Pub. at \$20.00. \$1.00

# Aircraft of the West German Armed Forces

## CESSNA T-37B AND NORTHROP T 38A

For the first years after the birth of the new German Luftwaffe, in 1956, the majority of its aircraft were of US origin. The combat elements were equipped with F-86 Sabres and F/RF-84's, while advanced jet training was accomplished on the T-33A.

In 1960, when plans began for the introduction of a second generation of aircraft, consideration was given to a replacement for the T-33A. The type favored for this role was the Northrop T-38A Talon which had been selected by the USAF for similar duties. Shortly after the Talon was introduced into the USAF Air Training Command (ATC) in 1961, the aircraft was evaluated by a group of Luftwaffe pilots under the command of Col. Rall. In anticipation of a procurement of some 200 aircraft of this type, six Luftwaffe flying instructors began a familiarization course on the T-38A in December 1962.

At the same time, it was realized that the training of Luftwaffe pilots in Germany would have several disadvantages: First, the changeable European weather would cause many days to be unsuitable for training flights thereby extending the period of training. Second, the short distances between borders in Europe would concentrate training within a dangerously small air space over areas of dense population. Therefore, negotiations were begun for the transfer of all Luftwaffe jet training to the US. An agreement was signed on 15 July 1963 and the first 12 Luftwaffe pilots arrived in the US in October 1964.

At first, training aircraft were provided by the USAF, but the agreement had stipulated that the Luftwaffe was to procure their own aircraft. To correspond with the USAF training pattern, the Luftwaffe decided to obtain the Cessna T-47B for basic jet training and the Northrop T-38A for advanced jet training. After approval by the Defense Committee of the German Parliament in July of 1965, the Defense Ministry ordered 47 T-37B and 46 T-38A through the US government. Financed in Fiscal Year 1966, the T-37B received USAF serials 66-7960 to 66-8006 and the T-38A received serials 66-8349 to 66-8404.

From April 1966 onwards, the whole Luftwaffe jet training program was transferred to the US. The German Luftwaffe Training Command in the USA (Deutsches Luftwaffen-Ausbildungs-Kommando USA, abbreviated DtLwAusbKdo USA) was situated at Fort Bliss. Under DtLwAusbKdo USA control was the First Squadron for basic and advanced training stationed at Williams AFB, Arizona; the Second Squadron for operational training at Luke AFB, Arizona; and the Third Squadron for RADAR and electronics training at Keesler AFB, Mississippi.

With the delivery of the first aircraft of the German order, the First Squadron (1.DtLwAusbKdo USA) moved to Sheppard AFB, Texas and came under the organization of the 3630th FTW of the USAF's ATC. The Squadron received its first three T-37B in mid-1966 followed by its first T-38A (named "City of Wichita Falls") in February 1967.

Prospective jet pilots would enter 1.DtLwAusbKdo USA at Luke AFB for a 53 week course consisting of theoretical instruction as well as 132 hours on the T-37B and 130 hours on the T-38A. He then moved to 2.DtLwAusbKdo USA at Luke AFB for operational training on the TF-104G and F-104G, or to Weapon School 50 (Waffenschule der Luftwaffe 50, abbreviated WaSLw 50) at Furstenfeldbruck, Germany for G.91 training.

The T-37B and T-38A at Sheppard AFB were not used exclusively by the German students but were integrated into the inventory of 3630th FTW. In recent years, some German T-37B have been seen at Randolph AFB.

With the service introduction of the Panavia 200 Tornado at the end of this decade, a new task will be imposed on the T-38A. Following advanced training, "fighter-lead-in-training" will also be conducted on the Talon. At first the T-38A will not be modified, but at a later date these aircraft will be configured to carry armament. The USAF has already examined several proposals; the cost of modification will be approximately \$56,000 per aircraft and the service life of both the T-37B and T-38A will be extended to 1990.

Exact information on the total losses of German T-37B and T-38A is not available. However, the first T-38A was lost in the summer of 1967 when an aircraft exploded shortly after takeoff. In February 1969 there were 43 T-38A reported in service; on October 1973 the strength was 90 T-37B and T-38A; and in January 1974, the CinC Lt. Gen. Rall spoke of 42 T-38A in service.

### CAMOUFLAGE AND MARKINGS

Both types were delivered in natural metal, but were painted over-all white at the same time this scheme was adopted by the ATC.

For reasons of administration and insurance, Luftwaffe aircraft in the US carry the US national insignia and standard USAF markings. The serial numbers appear on both sides of the fin as does the ATC badge.

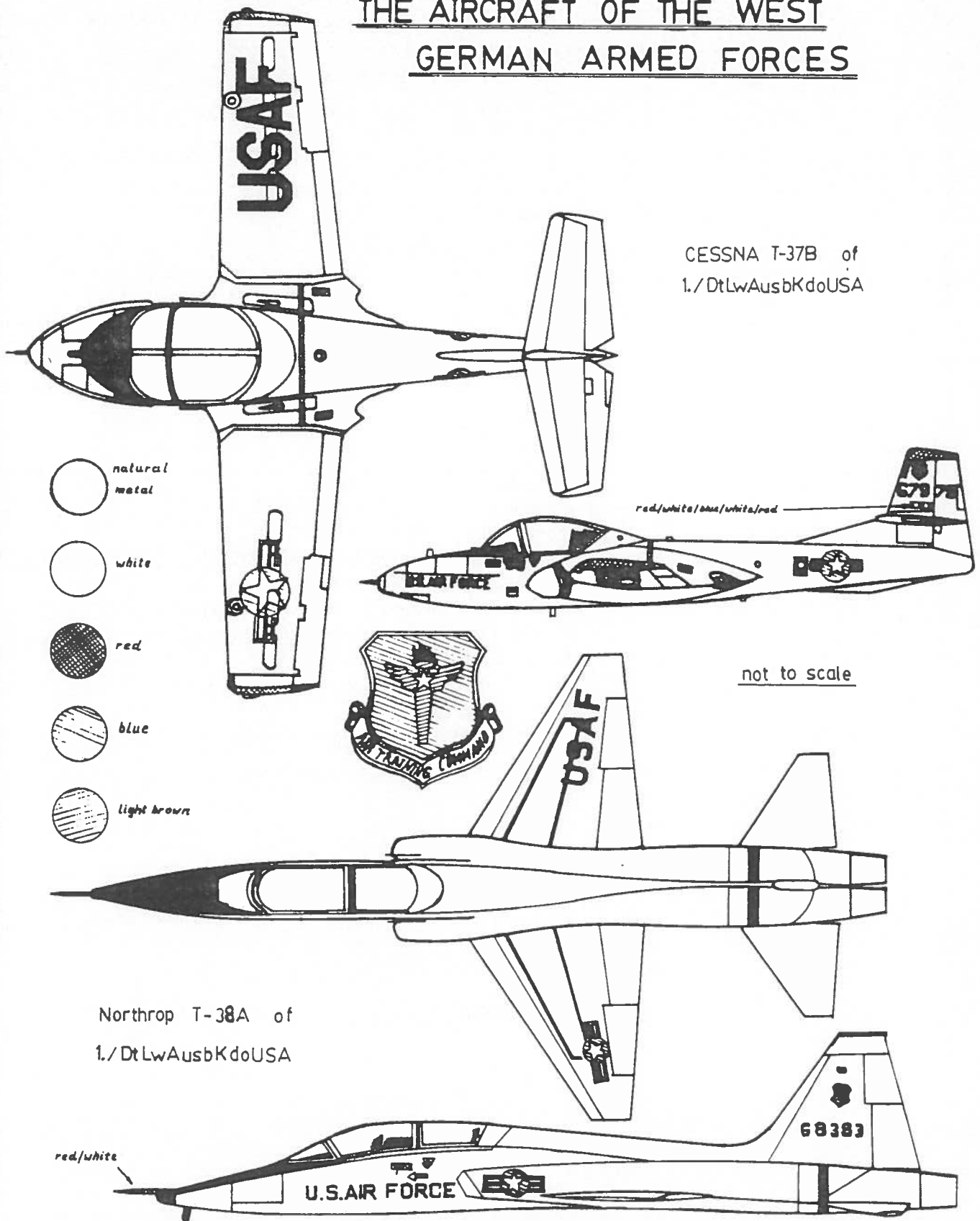
Paul E. Bezouska SAFCH #34

### T-38A-65-NO

T-37B-CE				c/n	s/n	N5938	66-8367	N5957	66-8386
c/n	s/n	40935	66-7975	40951	66-7991	N5905	66-8349	N5939	66-8368
40920	66-7960	40936	66-7976	40952	66-7992	N5966	66-8350	N5940	66-8369
40921	66-7961	40937	66-7977	40953	66-7993	N5967	66-8351	N5941	66-8370
40922	66-7962	40938	66-7978	40954	66-7994	N5968	66-8352	N5942	66-8371
40923	66-7963	40939	66-7979	40955	66-7995	N5969	66-8353	N5943	66-8372
40924	66-7964	40940	66-7980	40956	66-7996	N5970	66-8354	N5944	66-8373
40925	66-7965	40941	66-7981	40957	66-7997	N5971	66-8355	N5945	66-8374
40926	66-7966	40942	66-7982	40958	66-7998	N5972	66-8356	N5946	66-8375
40927	66-7967	40943	66-7983	40959	66-7999	N5973	66-8357	N5947	66-8376
40928	66-7968	40944	66-7984	40960	66-8000	N5974	66-8358	N5948	66-8377
40929	66-7969	40945	66-7985	40966	66-8001	N5930	66-8359	N5949	66-8378
40930	66-7970	40946	66-7986	40978	66-8002	N5931	66-8360	N5950	66-8379
40931	66-7971	40947	66-7987	40979	66-8003	N5932	66-8361	N5951	66-8380
40932	66-7972	40948	66-7988	40980	66-8004	N5933	66-8362	N5952	66-8381
40933	66-7973	40949	66-7989	40981	66-8005	N5934	66-8363	N5953	66-8382
40934	66-7974	40950	66-7990	40982	66-8006	N5935	66-8364	N5954	66-8383
						N5936	66-8365	N5955	66-8384
						N5937	66-8366	N5956	66-8385
									?

NOTE: Only 46 aircraft of the T-38A batch are German

# THE AIRCRAFT OF THE WEST GERMAN ARMED FORCES



# Indonesian Sabres

On 21 April 1972, the Australian Government announced the gift of sixteen Avon-Sabres to Indonesia.

The aircraft were refurbished by the RAAF and 150 members of the ANGKATAN UDARA REPUBLIC INDONESIA (AURI) were sent to RAAF Williamstown, NSW to learn to fly and maintain the aircraft. Many of the pilots had previously flown MiG-21's, before a lack of spares grounded the Soviet aircraft.

Later in 1972, an advanced party of nineteen RAAF personnel left Australia for Indonesia. They were to assist with the installation of navigational aids and air traffic control communications at the Iswahyudi air base in east Java.

When the Avon-Sabres were delivered they were accompanied by another 30 RAAF personnel, who remained for 24 months, advising on aircraft operations, maintenance and equipment support. The RAAF detachment was led by the Project Manager, Wing Commander W. Richardson.

The serial numbers of the aircraft involved were:

Indonesian Serial	ex-RAAF Serial
F-8601	A94-361
F-8602	A94-366
F-8603	A94-368
F-8604	A94-945
F-8605	A94-949
F-8606	A94-952
F-8607	A94-957
F-8608	A94-963
F-8609	A94-968
F-8610	A94-969*
F-8611	A94-971
F-8612	A94-972
F-8613	A94-975
F-8614	A94-980
F-8615	A94-988
F-8616	A94-990
F-8617	A94-955
F-8618	Not Known

\* F-8610 crashed during a landing approach at Iswahyudi in November 1974. The pilot ejected safely and separated from the ejection seat. He landed unharmed, but unfortunately the seat killed a farmer working in a nearby field. The aircraft was a total loss.

It is apparent from this listing that Indonesia has received eighteen, not sixteen Avon-Sabres. Photographic evidence is available to prove this.

From Willianstown the aircraft were ferried to Indonesia via RAAF Amberley, Mt. Isa, Darwin and Den Pasar

(Bali) to their base at Iswahjudi, on the island of Java. The aircraft flew in two groups; the first of which arrived on 19 February, 1973; the second group arrived two days later. A94-352 was damaged in transit, during take-off from Bali; its replacement arrived at Iswahyudi on the 23rd. The damaged aircraft was dismantled and flown to Australia in an RAAF Hercules. Its AURI serial is not known. On each leg of the ferry flights two Orions from No. 11 Squadron, flew as escort in case they were needed for search and rescue, and for communications purposes. Two Canberras from No. 2 Squadron, flew ahead of the Avon-Sabres in a weather reconnaissance role. Additionally, there were numerous flights by RAAF and AURI Hercules transporting stores and equipment. Australia also provided an instructional airframe, A94-370, for ground training purposes. It was embarked in the m.v. GUINUNG KERINTIJ at Sydney on 28 December 1972.

During the celebration marking Indonesia's National Aviation Day on 9 April, 1973, the Australian Defense Minister, Mr. Lance Barnard, officially handed over the aircraft, in a ceremony at Iswahyudi.

In a change of title in mid 1974, the AURI was re-named TENTARA NASIONAL INDONESIA - ANGKATAN UDARA (TNI-AU). The Avon-Sabres were initially assigned to No. 14 Squadron, AURI but, in the re-designations which occurred later in 1974 the unit was renamed SAT-SERGAP F-86 SQUADRON. The F-86 presumably, refers to the first few digits of their TNI-Au serial number. The aircraft illustrated, F-8614, carries the markings of the unit commander. They are not squadron markings. A variation of these was previously carried on a MiG-17 flown by the same pilot. The other aircraft are finished as shown in the photographs.

MARKINGS AND INSIGNIA: The Avon-Sabres were Silver overall with all stencilling in English. The AURI serial was painted on the aft fuselage and part repeated on the nose, in Black numerals ten inches high. The RAAF serial was placed under the fin flash, with numerals four inches high. The Red and White pentagonal national insignia of Indonesia, was placed in the same six positions as the former RAAF kangaroo roundels.

ACKNOWLEDGEMENTS: To Mr. A.G. Wilkinson of C.A.C. who provided the colour slides, our sincerest thanks. D.R. Anderson and R.N. Alford also assisted in the preparation of this article.

(Editor's Note: This article first appeared in MODEL-CRAFT, No. 4, 1976 and is reprinted here with the kind permission of IPMS Australasia.)

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FIVE TIME AS MUCH IS FIVE TIMES BETTER?

## A Comparative Review of the Matchbox & Heller Vignettes

Ignoring the Airfix and Hasagawa kits of the prototype Viggen, there are now two kits in 1/72 scale of the later versions of this striking aircraft. Modellers are however, faced with a dilemma with the HELLER costing £3.00 (\$6.00) and the MATCHBOX costing £0.68 (\$1.25). (Editor's note: Prices in the US are about \$7.00 and \$2.50 respectively.)

Impressions and reputations can be deceptive. Comparing the kits, the MATCHBOX looks heavy against the HELLER, although measurements are identical. The HELLER kit has a very much finer finish with particularly neat cambered foreplanes and leading edges to the mainplane. Unfortunately, these very good parts are spoilt by very poor fit with large amounts of filler needed. The noses provided are spoilt by their oval cross section to match a round fuselage cross section.

The MATCHBOX kit fits together well and can be easily improved.

The HELLER kit provides for the AJ-37, SF-37 and SK-37; the two-seat version being particularly attractive. MATCHBOX provides for an AJ-37 and SH-37 and pro-

vides R28 Falcon and RB 04E Anti-Shipping Missiles. Oddly HELLER provides no underwing stores which is particularly annoying at the price, especially if you want to show the RB 05A air-to-surface missiles, low-drag bombs with standoff fuzes, or the RB 324 Sidewinders .... thank heaven for the AIRFIX Phantom.

Decals are very similar in quality in both kits. Note some alternative markings:

AJ-37 Attack Command	F7	Prefix 7	Codes 04,10
	F15	Prefix 15	Codes 21,22,26,43
	F13	Prefix 13	Codes 13
SK-37	F15	Prefix 15	Codes 54,56
SH-37	F13	Prefix 13	Codes 13

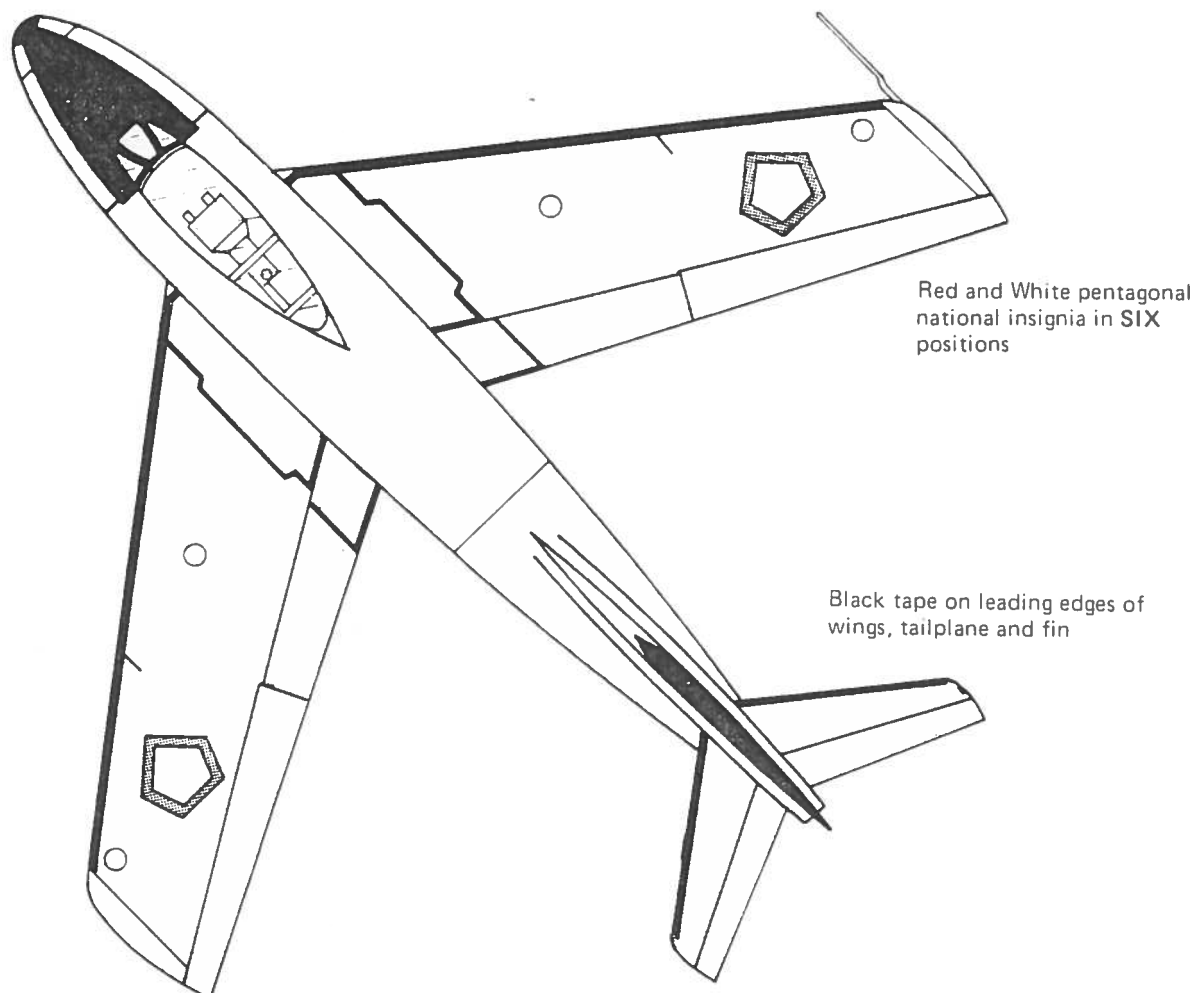
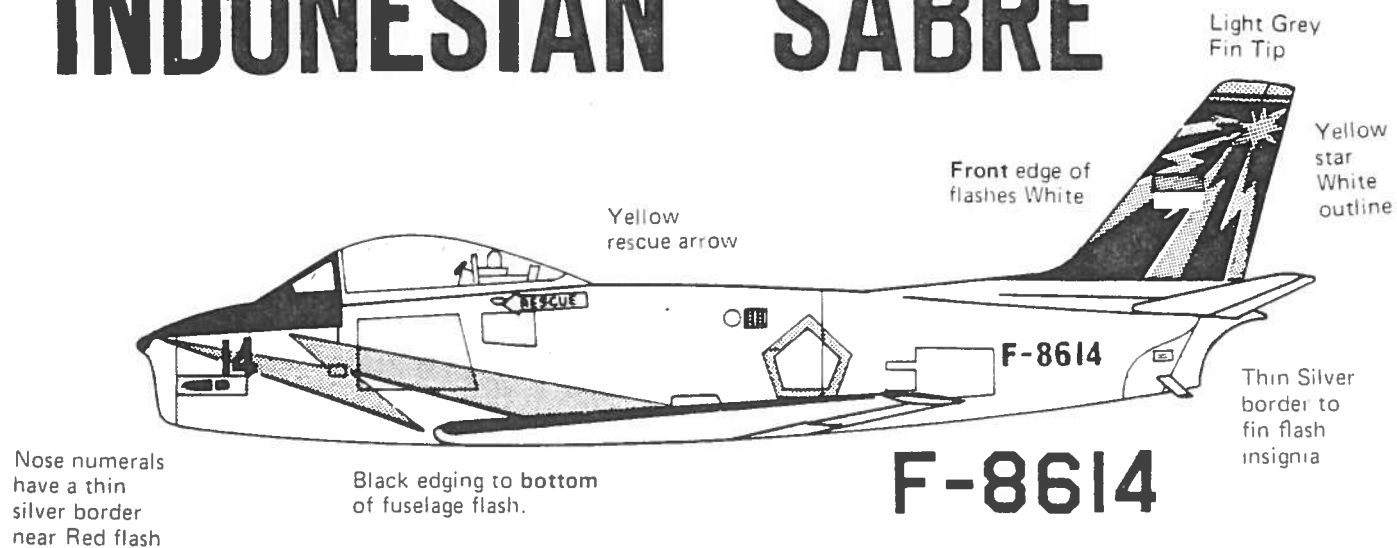
If you want a set of Viggens, then buy a HELLER kit to build the two seat version and use the other parts on MATCHBOX'x kit for the other versions.

If you want only one, I suggest you buy the MATCHBOX kit and work it up. You will find the full colour box art and plans an invaluable aid. That is, if there is anyone mad enough to try more than one Vigen in THAT finish.

Wyn Edwards (SAFCH #31)



# INDONESIAN SABRE



# Norwegian Scimitar

The Armstrong Whitworth Scimitar was the last in a long line of biplane fighters developed from the original Siskin which first flew in 1919. This was powered by the ill-fated ABC Dragonfly which was one of the main factors in its lack of success. However, the line was developed using the Armstrong Siddley Jaguar, into the Siskin II which varied considerably from the original airframe. The first aircraft won the Kings Cup air race in 1923, whilst a second machine was exported to Sweden where it was flown on a ski undercarriage. The Siskin III which followed had much modified main planes with a very small lower wing. This type was accepted by the RAF and 62 were built, including 12 two seaters, and equipped two squadrons. A revised fuselage and tail unit together with an uprated Jaguar characterise the Mk IIIa of which 398 were built to equip 10 squadrons of the RAF. Top speed was 153 mph and the time to 20,000 feet was 16.9 minutes. The Siskin V which had completely revised wings and tail unit did not go into production.

The next Armstrong Whitworth design was the Starling I. The fuselage was similar to the Siskin V but the wings featured a symmetrical aerofoil section (RAF 30). This was not a success and a subsequent set of wings were made with the Clark YH section. This gave a top speed of 177 mph and a time of 17.5 minutes to 20,000 feet. The Starling Mk II was a completely different aircraft with a wing arrangement similar to the Siskin III but still using the Clark YH section.

Late in 1930 the AW XVI appeared, similar in appearance

to the Starling I but much improved aerodynamically, and with a Panther engine. The top speed was 195 mph and the time to 20,000 feet was 18 minutes. The Bristol Bulldog was preferred to the AW XVI for the RAF fighter to replace the Gamecock but four aircraft were exported to China in 1933.

The Scimitar first flew in 1934 and was a modified AW XVI with a 640 hp Panther VII engine. This gave a top speed of 221 mph and a time to 20,000 feet of 11.75 minutes. It was again unsuccessful in the competition F7/30 for the RAF, the Gloster Gladiator being the type chosen.

The Norwegian Government became interested in the type following a demonstration by the first prototype G-ACCD. The plan was to build the aircraft at the Army Aircraft Factory at Kjeller near Oslo. Four aircraft were supplied by Armstrong Whitworth, Serial Numbers 405-408. As the parent company was not continuing production, the licencing agreement was eventually cancelled. The four aircraft remained in Norwegian service as trainers until the outbreak of war in 1939.

Armstrong Whitworth Scimitar  
Span 33 ft      Length 25 ft      Wing Area 261 sq ft  
Maximum Weight 4100 lb  
Maximum Speed 221 mph at 15,000 ft  
Stalling Speed 60 mph  
Time to 20,000 ft 11.75 minutes  
Service Ceiling 31,000 ft  
Endurance 2.5 hours

J. J. Partridge (SAFCH #33)

**reviews- reviews-reviews-reviews-reviews-reviews-reviews-reviews-reviews-reviews-reviews-reviews**

GERMAN MILITARY AVIATION 1956-1976 by Paul A. Jackson  
BELGIUM MILITARY AVIATION 1945-1977 by Paul A. Jackson  
DUTCH MILITARY AVIATION 1945-1978 by Paul A. Jackson  
SPANISH & PORTUGUESE MILITARY AVIATION by John Andrade

Although I've been able to obtain only the middle two titles, these two books are so similar in format that a review of one should suffice to introduce the entire series.

In DUTCH MILITARY AVIATION, the author describes his goal as "to present in easy cross-reference format the histories of all aviation units and aircraft types which have served with the Dutch armed forces since their reformation after the Second World War, and to present an overall picture of the present situation." That he is able to accomplish this is 134 pages is a testament to his ability to organize his material. This book is divided into four parts: Part One "A HISTORY" (5 pages) briefly covers the entire history of the Koninklijke Luchtmacht, Army Aviation, and Marine Luchtvaart Dienst in Europe., Part Two "UNITS/ ORGANIZATION" (35 pages) lists all aviation units with histories, present status, and insignia; KLU Orders of Battle (10 May 1940, and 1 January 1950, 1955, 1960, 1965, 1970, & 1978); MLD Orders of Battle (1 January 1950, 1955, 1960, 1965, 1970, & 1978). Part Three "AIRCRAFT REVIEW" (30 pages) has subsections on 'Markings and Colour Schemes', 'KLu Serial Numbers', MLD Serial Numbers', Radio Callsigns', & 'Individual Aircraft Histories' (49 types in 27 pages).

Equally important are the six appendices: DUTCH SQUAD-  
RONS OF THE RAF AND FAA 1940-45 (6 pages); DUTCH MILITARY  
AVIATION OVERSEAS (2 pages); DUTCH MILITARY AIRCRAFT ORDERS  
PRE-1940 (1 page); DUTCH MILITARY AIRBASES (1 1/2 pages with  
maps); INSTRUCTIONAL AIRFRAMES (1/2 page); TIME EXPIRED AIR-  
CRAFT AND GATE GUARDIANS (1 page); KEEPING UP-TO-DATE (1/2  
page).

The text and tables are complimented by 99 well-choosen, beautifully reproduced photographs.

These books should be of interest to all students of

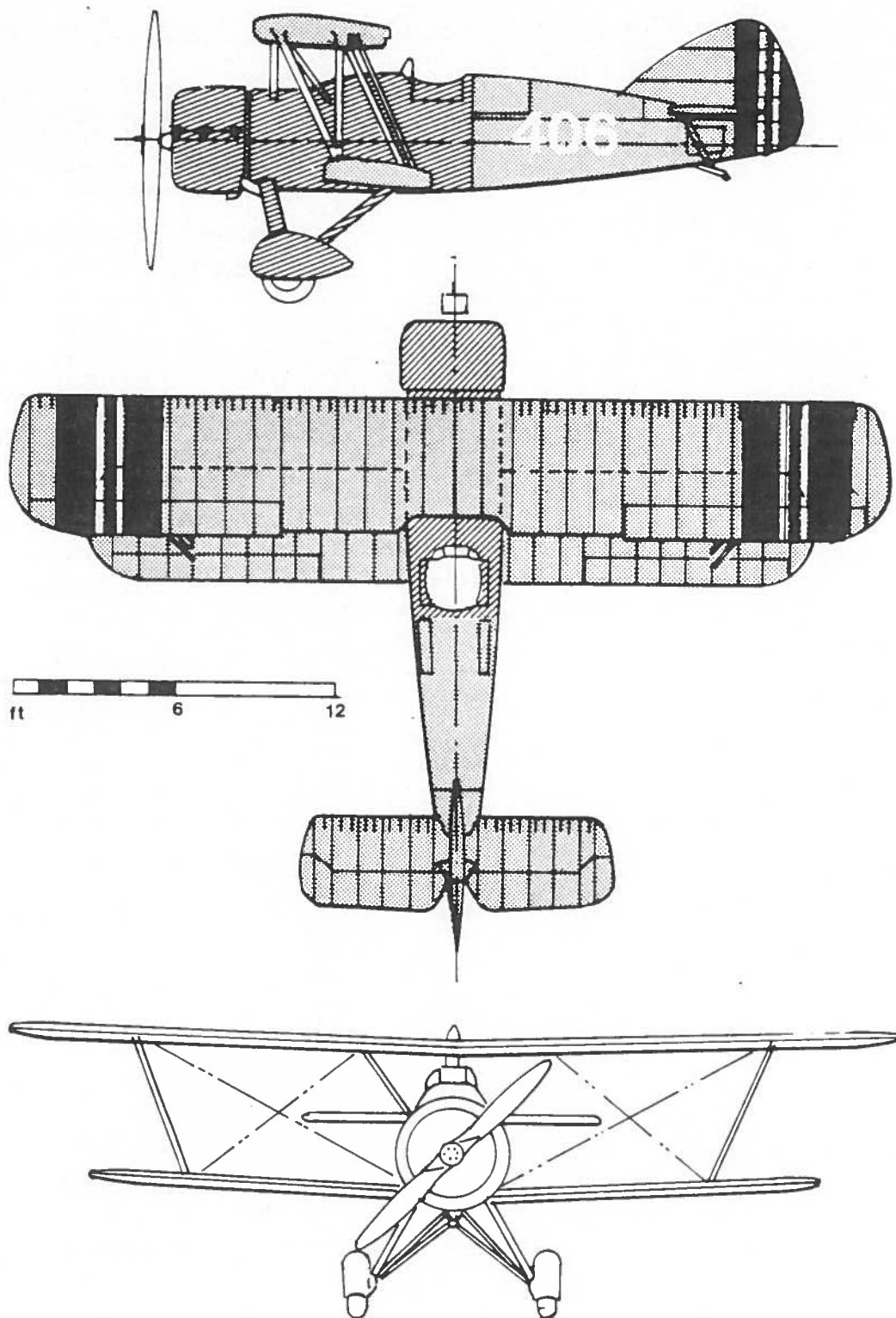
post-war military aviation in Western Europe. Perhaps if this series gets the support it so richly deserves, the publishers will consider expanding the coverage to other countries such as Denmark and Norway and as far as censorship allows.

These books may be obtained directly from the publisher: Midland Counties Publications Ltd., 24 The Hollow, Earl Shilton, Leicester LE9 7NA, England. The prices are £3.45, £2.95, £3.45, & £2.95 respectively. The publisher asks that you add 10% to cover surface mail and that overseas customers pay by IMO. US and Candian customers may pay by personal dollar check, but add 10% to cover bank charges. For the current exchange rate, check your local newspaper or bank. At the time of this writing (21 Sept. '78, £1.00 = US \$1.94.) These books can also be obtained from SKY BOOKS INTERNATIONAL, 48 East 50th St., New York, NY 10022. The list price for the DUTCH and BELGIUM books is \$12.00, but I don't have information on the other two.

In a reply to a letter questioning the rather high price, Bill Dean of SKY BOOKS graciously provided the following: "I'm afraid that there is no error in pricing these books. The reason for the high prices are as follows: a) Both are high priced and low trade-discounted. b) We have to increase the prices so that we can distribute the books to the trade in the US. We have to pay for shipping via container-shipment, plus the services of our broker. Then we have to set a US price at which we can give 40% discount to the trade. Like any other importer, we're providing a service. If you feel that it's worth the trouble for your readers to order direct, after finding out from the publisher the dollar cost, shipping charges - and then getting the book via the tender mercies of the US mails, I suggest that you simply list the publisher's name and address and British price."

Well, there's both sides of the coin. You can take your choice, but do make a choice. These books are a great addition to any SAFCher's library.





 DARK GREEN  
 RED

 POLISHED METAL  
 BLUE

## A.W. Scimitar

## THE FINNISH AIR FORCE TODAY

Sixty years ago, on 6.3.1918, the Finnish Air Force received its first aircraft, a Thulin type D (Morane Saulnier Parasol, licence-built in Sweden). This aircraft was donated to the FAF by Count Eric von Rosen, who also gave the FAF his personal good luck symbol, a blue swastika, to be used as their national insignia. Since then the FAF has operated a great variety of aircraft types. The present situation is no exception. FAF fighters in service today come from the Soviet Union (Mig-21F) and Sweden (Saab 35 Drakens); transports come from the USA (C-47 Dakotas); liaison aircraft from the USA (Piper Cherokee Arrows and Cessna 402B's); target tugs from the Soviet Union (Il-28's); trainers from France (Potez-Fouga Magisters), Sweden (Saab 91 Safirs), and the Soviet Union (Mig-15UTI and Mig-21UTI); and helicopters from the Soviet Union (Mi-4 and Mi-8), Italy (Agusta Bell AB 206A's), and the USA (Hughes 500C's). Soon to be added are aircraft from Great Britain (H-S Hawks), the Soviet Union (Mig-21bis), and Finland (Valmet Vinka = Leko 70).

### DRAWINGS

Saab 35X Draken, DK-211, (Reference: ILMAILU 4/1976). This is one of the 12 Drakens built in Finland. The FAF also has six 35F, five 35BS, and three 35C. Camouflage: Olive drab 24079 and dark grey-blue 26076 top; light grey-blue 26250 bottom. Fuselage underside is silver; air intakes and antennas are greyish green; nose cone and codes are black. Nose probe is black with silver tip and yellow bands. Parachute housing is green-grey. National insignia: 72 cm diameter with a narrow (2 cm?) border in 6 positions. "VAARA" (dragon) is black on yellow background with no border. LapLsto emblem: Yellow background, black border, light green "ears" of shield, white surrounding. Bull is dark brown and grey with white horns and nose ring. Note: On starboard side the bull faces to the left. (References: IPMS-FINLAND MALLARI #7 and #16; Keskinen, Stenman, & Niska, THE FINNISH AIR FORCE'S AIRCRAFT 1939-72.)

Mig-21F-12, MG-48, (Reference: ILMAILU 6-7/1974). Some of the 30, or so, FAF Migs are now painted a very light grey overall. The FAF has 6 Mig-21UTI's; four Mongol A's and two Mongol B's. The Mongol A's are silver and the Mongol B's are olive brown and dark brown over grey green. Camouflage: Light grey 27722 (?) overall. Dark green 24148(?) nose cone, front part of under-fuselage fin, round antenna behind nose probe. Rear fuselage is dark metal. Black codes. National Insignia: 72 cm diameter on wings and 60 cm diameter on fuselage; narrow black border; 6 positions. Karlsto emblem: Black with white eyes. Note: Faces forward on both sides. (Reference: MALLARI #10 and #18, Keskinen et al.)

Fouga CM 170 Magister, FM-77, (Reference: Author's photo.) This is one of the 62 Magisters built in Finland 1962-67. Eighteen were purchased from France 1958-59. Now 60 remain and in 1979 these will be replaced by 50 Hawker-Siddeley Hawks. Camouflage: Silver overall, black codes, red air intakes and text. National insignia: 60 cm diameter on wings, 48 cm diameter on fuselage, narrow black border, in 6 positions. (Reference: Keskinen et al, also a MALLARI article on the Magister is scheduled for a future issue.)

Mil Mi-8, HS-1, (Reference: MALLARI #16.)

After KAR-AIR's Twin Otter crashed in March 1973, the plane was not located for several hours. It was finally found by a Swedish Navy helicopter that was called in to help. This incident convinced the FAF of the need to add a heavy rescue helicopter to its inventory. In June 1973, the first two Mi-8's arrived. Later, two more were purchased. Camouflage: Dark green overall, day-glo orange band on tail. Tail rotor is black with red-white-red tips. White codes, ILMAVOIMAT (=AIR FORCE), and nose of Doppler radar. National insignia: 120 cm diameter (?) in three positions without black border. Hekoltue/KuljLLV badge: Silver background, black border. Black dragonfly, blue wings, eyes, and upper part of sword; grey left side of head, lower part of sword, and upper forelegs; brown rear legs and lower forelegs. Life buoy is red and white. (Reference: MALLARI #22.)

Martti Kuivalainen SAFCH #282

## FINNISH AIR FORCE ACCIDENTS

### MAGISTER

FAF Fouga Magister, FM-65, crashed 2.11.1977 at Pylkonmaki. Both pilots were killed. The cause of the crash was the explosion of a signal flare in one of the pilot's pockets. During 1977, 5 Magisters have crashed and 7 pilots were killed. 13.1.1977 two pilots died when a Magister crashed at Rovaniemi. 15.6.1977 one pilot died when a Magister crashed at Kauhava. And, 3.8.1977 one pilot died when a Magister crashed at Pori.

In 1976, there was one Fouga crash, in August; one pilot died when his a/c crashed into a lake near Viitasaari. In December 1974, one pilot died when his Magister crashed at Korttesjarvi during a night training flight. In 1972 one pilot died in a crash, in 1970 two in a single crash, 1968 one pilot in a crash, 1967 one pilot in a crash, 1966 two pilots in a crash, 1963 one pilot in a crash, 1961 two pilots in a crash, and 1959 two pilots in a crash.

Altogether, 21 pilots have lost their lives in 20 Magister crashes since 1958. The FAF purchased a total of 80 Magisters, including 62 built in Finland 1960-67, and 60 of those a/c remain in service. By the end of June 1977, 182,000 hours had been flown in the Magister. These a/c were grounded after the latest accident (2.11.1977), but began flying again on 18.11.1977. There has been much talk about the Fougas in the newspapers and it is being said that too much is being done with these planes. Also, it is said that the Fougas are underpowered and that the engines do not have de-icing equipment.

### Mig-21F

Finnish AF Mig-21F crashed at Rissala 19.11.1977 while it was returning with 3 other Migs from a ceremonial fly-over at the burial of the 2 pilots killed in the latest Magister crash (2.11.1977). The cause of the crash was the failure of the right main landing gear to extend; the pilot was told to leave the plane and the a/c crashed into a forest. It is said to be in good condition, but it will not be repaired because Mig-21bis (unfortunately, I don't know what version - maybe MF) will replace the older Migs before 1980.





Five Finnish Migs have crashed since the first arrived in Finland at 1430 on 24.4.1963. In May 1964 one Mig crashed at Kallavesi Lake; the pilot escaped. In May 1970, one pilot died when his Mig crashed at Joroinen. In July 1971 a Mig crashed at Rissala when it hit the tree tops during a low-level flight; the pilot ejected safely. And, in September 1975 a Mig crashed at Siilinjärvi; the pilot escaped.




Unfortunately, the number of Migs delivered to Finland is a "secret". However, it is known that between 5 and 7 Mig-21UTI's have been delivered and that the number of Mig-21F's is between 20 and 30. All Migs that have crashed were single-seaters. The first and fourth Migs crashed because of engine malfunctions.



References: Finnish Newspapers and ILMAILU MAGAZINE.



Martti Kuivalainen SAFCH #282

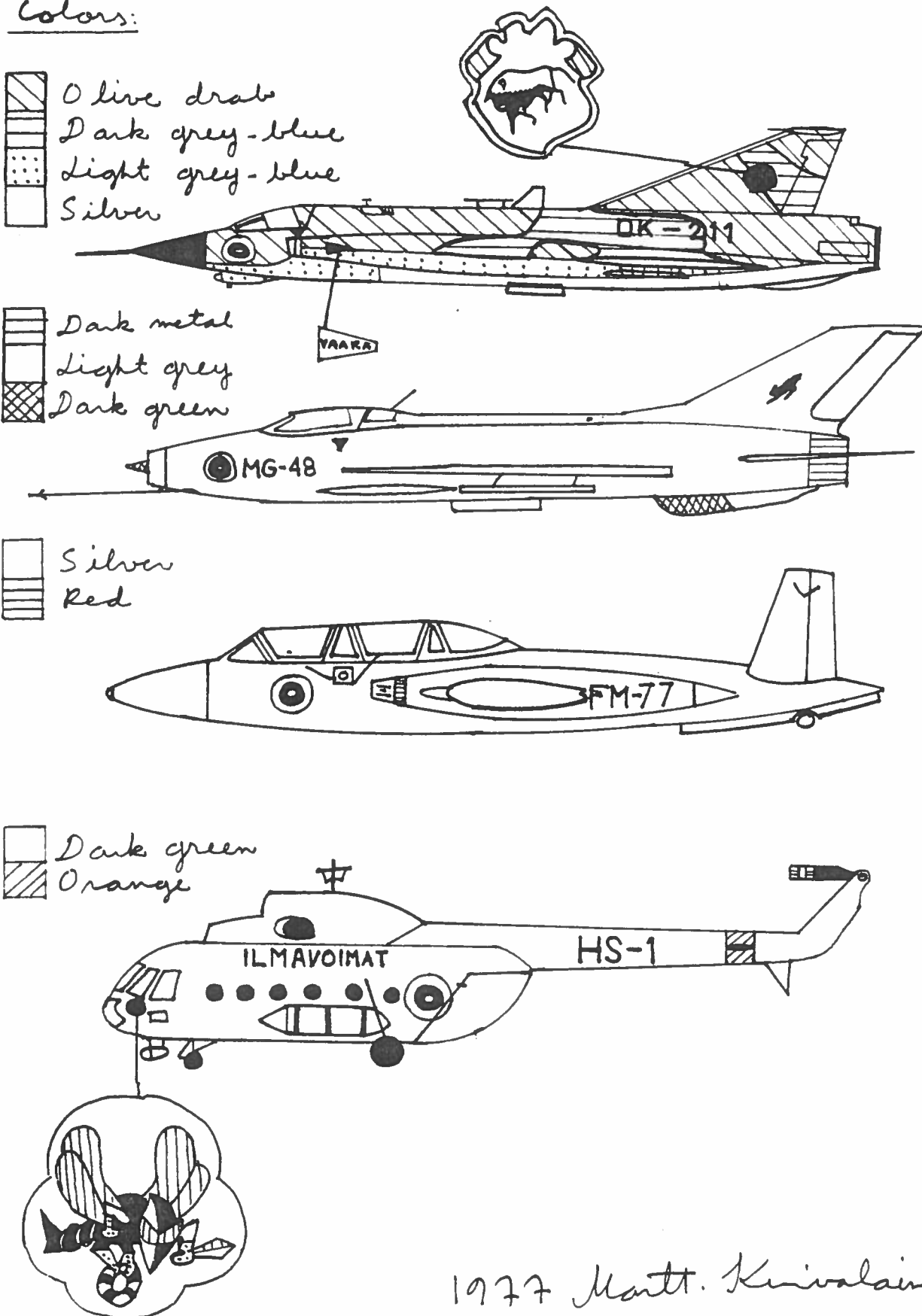
Colors:

-  Olive drab
-  Dark grey-blue
-  Light grey-blue
-  Silver

-  Dark metal
-  Light grey
-  Dark green

-  Silver
-  Red

-  Dark green
-  Orange



1977 Martti. Kivivala 282

# Air Forces In Miniature

## ALGERIA

With the departure of France in 1962 the National Liberation Army became the new country's sole means of defence. This small force organized the Force Aérienne Algérienne, the Algerian Air Force, with the assistance of Egypt, the Soviet Union and Czechoslovakia.

The first equipment came from Egypt in the form of five MiG.15 fighters. Two Beech D.18S transports were purchased for the personal use of President Ben Bella a year later and this is where the force remained for some years.

Soviet aircraft began arriving in 1965 in the form of MiG.21s and Il.28s and most Algerian equipment is now of Soviet origin. Recent purchases have included a number of French, Dutch and American types.

### ALGERIAN EQUIPMENT LIST

Mikoyan MiG.15/17/21	Mil Mi.1/4
Ilyushin Il.14/18/28	Sukhoi Su.7BM
Yakovlev Yak.11/18	Antonov An.12
Potez Magister	Sud Puma
Beech King Air	Hughes 269A
Fokker F.27	Beech D.18S

### ALGERIAN NATIONAL MARKINGS

Photographs of Algerian military planes are few and far between, our files show only one photo of the Potez Magister, which we have illustrated with this article, and one photo of a Beech D.18S. As we used the Beech D.18S for a plug in the IPMS USA QUARTERLY we have presented a rather well known illustration of one of the Algerian MiG.15s. To model the two aircraft which we illustrate here use the new Airfix Magister and wait for K.P. to bring out a Mig.15, Airfix's offering being very crude by modern standards.

The numbers on the following descriptions refer to illustrations on this page.

1. Original and most commonly used national insignia. Algerian markings are carried on either side of the fuselage and on the wings in U.S. style. In all cases the green portion of the roundel and fin flash face the nose of the aircraft and the tip of the wing.

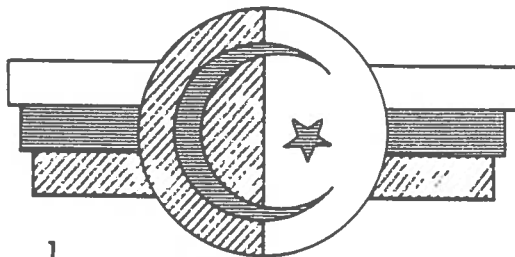
2. Probably the current national marking. Stepped wings have been removed and the marking takes on a simplified roundel look. Heavy black outline to roundel.

3. This modification to the national insignia has never, to our knowledge, been published before. It was seen applied to MiGs (date unknown) by SAFCH member #74 Claudio Maranta and was reported to MAI/SAFO artist Ted Koppel. The star is shown centered and upright while it is angled and off center on "standard" markings. The edges of the bars have been angled down to resemble wings, the center red bar appears as a thin stripe and the top and bottom colors have been reversed.

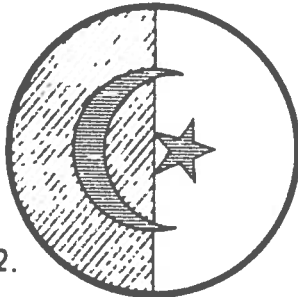
Fin flashes are variations of the national flag and have been seen in six styles. The most common variations are shown with the national markings on this page. The fin flash carried on the Magister is interesting in that it is green/white/green with the red star and appears on the tip of each fin. A swept flag has been seen on VIP aircraft, but this may be a civilian form of the national flag.

Material on the Algerian MiG.15 was obtained from ABT Decals and IPMS Seattle. The Potez Magister with new markings appears in the Italian magazine JP4, August, 1976, pg. 10. Algerian Ilyushin Il.28 drawings also appeared in the IPMS Seattle Soviet Aircraft Special some years ago.

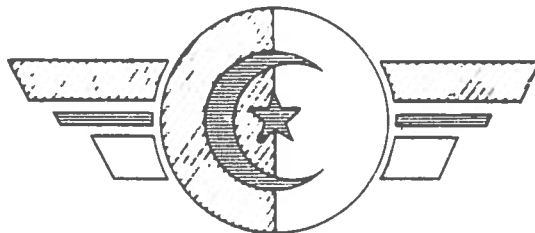
(Editor's Note: This article is reprinted with the kind permission of MODEL-AIRE INTERNATIONAL.)



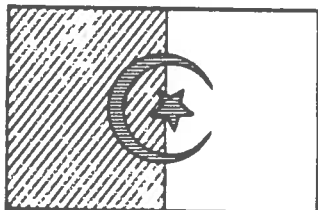
1.



2.

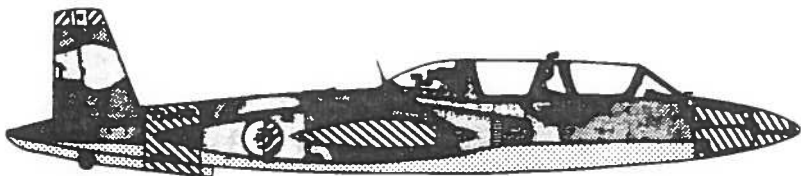
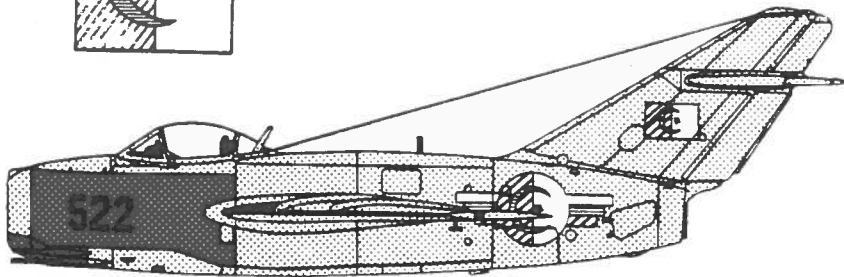


3.



Alternate To Above

RIGHT:MIKOYAN MIG.15 of the Algerian Air Force circa 1963. Natural metal overall, black markings, standard flag type fin flash, national markings in four positions.

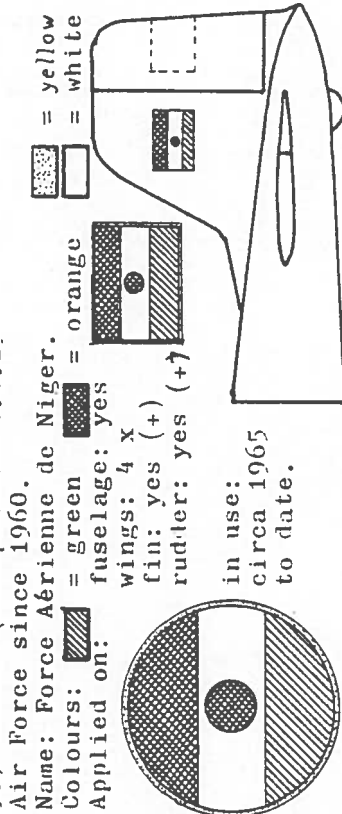


LEFT:POTEZ MAGISTER of the Algerian Air Force circa 1976. Camouflage colors appear to be tan and dark brown upper surfaces with pale blue under surfaces, dayglo orange nose, fuselage band and wingtip tanks. Red band around nose cone, black code 7T-WPV on fuselage band. Aircraft is identified as c/n 197. Fin flash is presented on both sides of each fin/rudder.

# AIR FORCE INSIGNIA OF AFRICA

## BY FRITZ BRAUN

### 9.) NIGER (independent 3.8.1960)

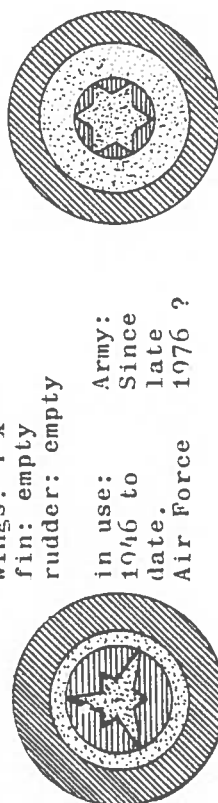


(+) = Application varies from type to type (on the Noratlas on the fin, on a C-47 on the rudder).

### 11.) ETHIOPIA

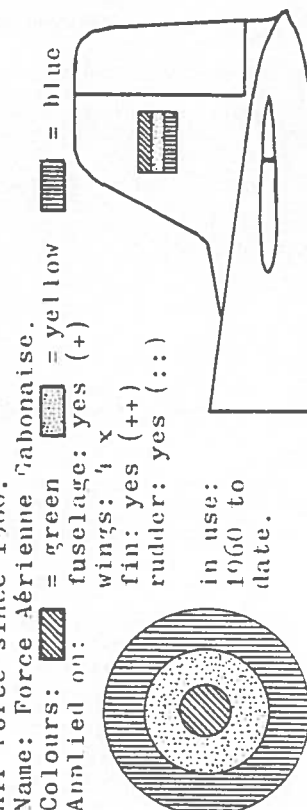
Air Force re-established in 1946  
Name: Ye Ethiopia Ayer Hail (Amharic for Ethiopian Air Force).

Colours: = green = yellow = red  
Applied on: fuselage: yes wings: 4 x fin: empty rudder: empty



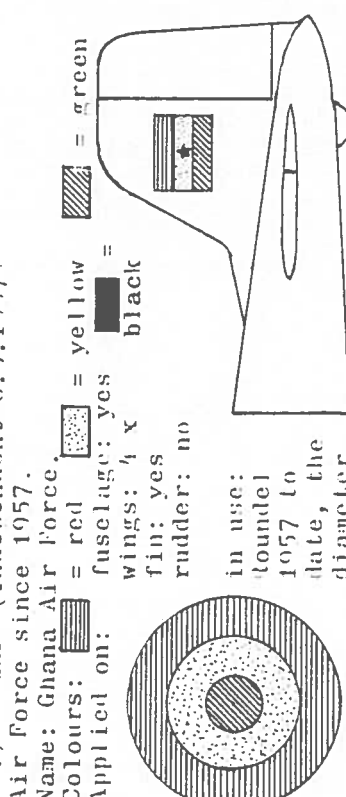
The roundel with the six-pointed star has been seen on an Army Twin Otter (AVIATION NEWS 1977) and on a Northrop F-5E (JP4 3/1978). However, on the F-5E, the fuselage insignia has the star oriented thus (The wing insignia are not visible in the photo.) This may have been a mistake made during painting. The Ethiopian F-5Es were embargoed and were not de-liveries.

### 10.) GABON (independent 17.8.1960)



(+) = optional together with rudder stripes, namely on smaller aircraft (:) as the Reims-Cessna F.337. Fin flash varies also, inserted is the style as used on the VIP A/C NA/C YS-11A.

### 12.) GHANA (independent 6.3.1957)



in use: roundel 1957 to date, the diameter of the green centre differs sometimes. The above fin flash (national flag) during 1966 introduced. It might be little known that between 1964 to 1966 the yellow colour was replaced by white. On the 28th February 1966 it changed again to yellow.

# VARIATIONS ON A THEME

## NATIONALIST FUSELAGE INSIGNIA

### 1936 - 1939

Shortly after Spain's civil war began in July, 1936, the Nationalist air force adopted a plain black disc as its fuselage insignia, along with a black St. Andrew's cross on a white background as a rudder emblem. The black disc was also applied with some consistency to the undersurfaces of the wings, while the upper surfaces were adorned with three narrow black chordwise stripes just inboard of white wingtips followed by a white chordwise cross. Although the pre-war colors of red-yellow-red were initially proposed for use by Franco's newly organized air arm, they would have been too easily confused with the Republican red, yellow and purple color scheme and the proposal was quickly vetoed.

It soon became apparent that the black fuselage disc would provide an ideal background for squadron, group and personal markings; thus the custom of embellishing the plain black insignia quickly took hold. Air units of Nationalist Spain's new allies, the Italian "Aviazione Legionaria" and the German "Legion Condor" became enthusiastic practitioners of the art as well.

Herewith are some examples of this rather unique treatment of the Nationalist insignia that appeared in Spanish skies during those fateful years.



1.



2.



3.



4.

1. The emblem of the 128<sup>o</sup> Squadriglia, XXII Gruppo Autonoma, Osservazione Aerea "Linci" (XXII Independent Observation Group "Lynx") This squadron, along with the 120th, flew the I.M.A.M. Ro37bis in Spain.

2. Insignia of the 8<sup>o</sup> Stormo Bombardamento Veloce "Falchi della Baleari" (8th. Fast Bombardment Wing "Falcons of the Balearics") Equipped with the tri-motored Savoia-Marchetti SM79, this unit operated from the island of Mallorca as part of the semi-autonomous "Aviazione Legionaria della Baleari."

3. Insignia of the 21<sup>o</sup> Stormo Bombardamento Pesante "Pipistrelli" (21st. Heavy Bombardment Wing, "Bats") This unit's four squadrons flew the Savoia-Marchetti SM81.

4. Although the Heinkel He51 was a mediocre fighter plane, it excelled in the ground attack role. Formed into "Cazas de Cadena" (chain fighters) so-called because of their technique of attacking ground targets in line astern, they served with considerable success throughout the war. This is the Nationalist Gruppo 1-G-2's emblem.



5.



6.



7.



8.

5. A fighter group commander's pennant - typical of "Aviazione Legionaria" Fiat CR32s.

6. Falangist "yoke and arrows" emblem. In some versions, the emblem appears in red on the black background and may be smaller in size.

7. Insignia of the Nationalist Gruppo 15, an army cooperation unit that flew the Heinkel He45 (called "Pavo" or "Turkey")

8. This emblem, a small white cross within the black disc, was peculiar to the Bf109 and may have been 1/J88's identification symbol as it has been seen on a number of aircraft known to have served with the first squadron.



9.



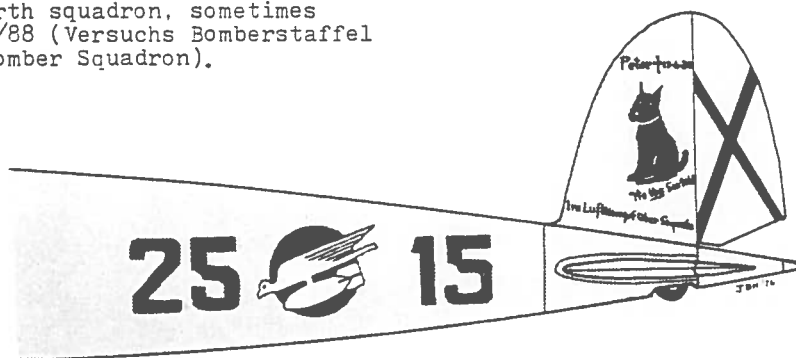
10.



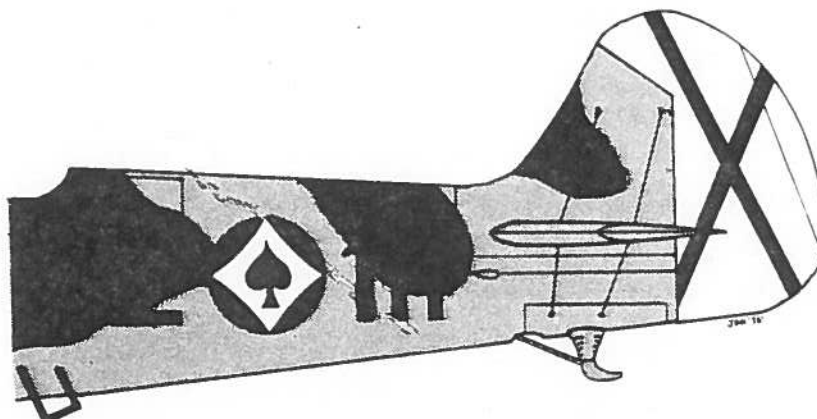
11.

9. Gotthardt Handrick, a gold medal winner in the 1936 Olympic games, took command of Jagdgruppe 88 in July, 1937. His personal initial, a stylised "H" appeared on the fuselage disc of his Bf109B, 6-56.
10. The Heinkel He111 was introduced into the Legion Condor's Kampfgruppe 88 on an experimental basis early in 1937, the first four aircraft taking part in the well publicised attack on Guernica. The Heinkels formed K/88's fourth squadron, sometimes referred to as VB/88 (Versuchs Bomberstaffel or Experimental Bomber Squadron).

11. The twin-engine Heinkel He59 float biplanes flew coastal and maritime bombing and armed reconnaissance missions from Pollensa on the island of Mallorca. Because of the size of the aircraft, the aft fuselage insignia was obscured when the aircraft was approached from the front quarters. A second black disc was placed on the nose to facilitate identification. Some were plain; others carried personal emblems such as this "ace of spades."



The diving eagle motif was a popular one with the Legion Condor's Kampfgruppe 88 and was seen often on their Heinkel He111s. The crew of aircraft 25-15 flew into action accompanied by their Scotty mascot "Peter" who met an untimely end during an air battle over Sagunto on June 13, 1938. This unhappy event was commemorated with an elaborate fin decoration.



Jagdgruppe 88's fourth squadron continued to fly the aging He51 on ground attack missions until the end of the war. Its "Pik-As" or "Ace of Spades" emblem shown here on aircraft 2-111, reappeared during WWII as the insignia of JG53.

James B. Haycraft SAFCH #192

# AIRCRAFT OF THE SMALL AIR FORCES

## CANADA

<u>Airspeed</u> Horsa Mk.II	48/50	3
" Oxford Mk.I,II,V	39/47	819
<u>Armstrong Whitworth</u> Atlas Mk.I	27/42	16
" Siskin Mk.III	26/42	12
<u>Auster</u> A.O.P. Mk.VI	48/58	36
" T Mk.VII	51/58	6
<u>Avro</u> 504K	20/28	62
" 504N	24/34	35
" 552A Viper	24/28	14
" 616 Avian	29/45	29
" 621 Tutor	31/45	7
" 626	37/45	12
" 652A Anson Mk.I,II,IV,V,VI	40/54	4,413
" 683 Lancaster Mk.III,X	44/65	229
" 694 Lincoln I,II,XV	46/48	3
" CF-100 Canuck Mk.I,2,3,4A,4B,5	51/75	692
" CF-105 Arrow Mk.I	58/59	5
" Wright	25/30	1
<u>Barkley Grow</u> T8P-1	39/41	1
<u>Beechcraft</u> 18A,B,D	39/45	6
" D-18S Expeditor Mk.3	43/69*	388
" Musketeer (CT-134)	71/75*	25
" T-34 Mentor (L.M.)	54/75	25
<u>Bell</u> 47D,G	48/65	9
" 206 (CH-136)	/75	
" CUH-1H Iroquis	68/75	
" CUH-1N Twin Huey (CH-135)	/72/76	
" CH-147	/76	7
" Kiowa (CF-136)	71/75	
<u>Bellanca</u> CH-300	29/44	13
<u>Blackburn</u> Shark Mk.II,III	36/44	26
<u>Bosing</u> 247D	40/42	8
" 299 Flying Fortress	43/46	6
" 450 Stratojet	56/59	1
" 707-320C (CC-137)	70/75	5
" CH-113 Labrador (CH-46)	/75	6
" CH-113A	/75	12
" -Vertol CH-47 Chinook	74/75	8
<u>Brewster</u> Model 340 Bermuda	43/46	3
<u>Bristol</u> F.2B Fighter	20/22	2
" Type 142 Blenheim	41/45	1
" 142 Bolingbroke I,II,III,IV	39/47	626
" 152 Beaufort Mk. I	41/44	15
" 170 Freighter Mk.31	52/67	6
<u>Burgess-Dunne</u>	14/15	1
<u>Canadair</u> CF-5A	68/75	89
" CF-5D	68/75	44
" CL-2 North Star Mk.1	47/66	24
" CL-11	50/67	1
" CL-13 Sabre Mk.1,2,3,4,5,6	50/75	1,183
" CL-28 Argus Mk.1 (CP-107)	57/76	33
" CL-41 Tutor 2	60 or 63/75	190
" CL-44D Yukon (CC-106)	59/71	12
" CL-66 Cosmopolitan	60/75	
" CL-540	66/75	13
" CL-84	/75	
" T-33 Silver Star Mk.3(see Lockheed)		
" 683A Starfighter CF-104 (" " )	/75	
<u>Canadian Vickers</u> Vancouver Mk.I,II	29/40	6
" Vanessa	27/27	1
" Varuna Mk.I,II	26/30	8
" Vedette Mk.I,II,V,VA,VI	25/41	44
" Velos	27/28	1
" Vigil	28/30	1
" Vista	27/31	1
<u>Cessna</u> L-19 Bird Dog Od1	54/75	25
" L-182D,E,F	61/69*	10
" T-50 Crane	41/49	826
<u>Consolidated</u> O-17 Courier	28/41	3
" Model 28 Catalina I,IV	41/46	30
" Canso	41/62	224
" 32 Liberator III,VI,VIII	43/48	148
" Privateer IX	46/49	1
<u>Convair</u> C-131 Cosmopolitan (CC-109)	/75	
CP-121	/76	13
<u>Curtiss</u> H-16	22/24	2
" HS-2L	20/28	30

<u>Curtiss</u> JN-4	20/23	10
" Model 81A-1 Tomahawk I,II	43/46	4
" 87 Kittyhawk I,III,IV	41/46	134
" P-40K-1 Warhawk	42/43	9
" Seawar	43/44	82
" -Reid Rambler Mk.I,II	29/54	9
<u>Dassault</u> Fan Jet Falcon 20	67/75	7
<u>deHavilland</u> D.H.4	20/28	12
" D.H.9A	20/29	12
" D.H.60 Moth	28/48	89
" Genet Moth	28/32	2
" D.H.75A Hawk Moth	29/35	3
" D.H.80A Puss Moth	31/44	19
" D.H.82A,C Tiger Moth	38/48	1,546
" D.H.83 Fox Moth	41/45	1
" D.H.90 Dragonfly	40/45	6
" D.H.98 Mosquito B.Mk.VII	43/51	444
" " XX		
" " 25		
" " F.B.Mk.21		
" " 26		
" " T. Mk.III		
" " 22		
" " 27		
" " 29		
" D.H.100 Vampire Mk.I,III	46/58	86
" D.H.103 Sea Hornet Mk.XX	48/48	1
" D.H.106 Comet 1A	53/65	2
" Canada DHC-1 Chipmunk 1,2	48/71	100
" " DHC-3 Otter	53/75	69
" " DHC-4 Caribou,1A,1B	60/76	9
" " DHC-5 Buffalo(CC-115)	67/76	15
" " DHC-6 Twin Otter(CC-138)	71/76	8
<u>Douglas</u> DB-1 Digby	39/46	20
" DB-7B Boston III,IIIA,IV	41/45	3
" DC-3 Dakota I,III,IV	43/75	169
" MO-2B	27/30	1
<u>Fairchild</u> 24H,R Argus	40/45	2
" 51,51A	30/46	9
" 71,B,C	29/42	23
" C-119F Flying Boxcar	52/67	769
" FC-2	27/31	15
" FC-2L	29/38	6
" FC-2W	28/37	6
" KR-34	30/36	1
" M-62A-4 Cornell Mk.I,II,III	42/48	1,555
" Super 71P	36/40	2
<u>Fairey</u> IIIC	20/20	1
" IIIF	29/30	1
" Albacore	43/49	6
" Battle I,II	39/46	740
" Firefly I,II,IV,V	46/54	57
" Swordfish II,III	43/47	105
<u>Felixstowe</u> F.3	21/23	11
<u>Fleet</u> Model 7 Fawn	31/47	51
" 16 Finch	39/47	431
" 50K Freighter	42/44	2
" 60 Fort	41/45	101
<u>Fokker</u> Super Universal	29/29	1
<u>Ford</u> Model 6-AT-AS Trimotor	29/37	1
<u>General Aircraft</u> Hotspur II	42/45	22
<u>Gloster</u> Type G.41 Meteor III,IV	45/55	4
<u>Grumman</u> Avenger 3	50/60	125
" G-21A Goose I,II	38/56	31
" G-23 Goblin	40/42	15
" G-89 Tracker S2F(L.M. DHC)	56/75	101
" G-111 Albatross HU-16(CSR-110)	60/75	10
<u>Handley Page</u> H.P.52 Hampden I	41/44	96
" H.P.54 Harrow I	40/41	2
" H.P.57,61 Halifax V,VI	44/47	75
<u>Hawker</u> Audax	33/43	6
" Hart	37/43	3
" Hind	42/43	4
" Hurricane I,II,XII,Sea Hurricane	39/48	503
" Tempest VI	46/47	1
" Tomtit	30/43	2
" Sea Fury 10,11	48/57	75
<u>Hillier</u> Model UH-12E Nomad	61/72	27
<u>Keystone</u> Puffer	27/34	2



<u>Lockheed</u>	10A	39/46	15
"	12A	40/45	10
"	26 Neptune	55/69	25
"	212	40/46	1
"	214 Hudson I,III,V,414,VI	39/48	247
"	583A Starfighter, F-104A	61/75	239
"	C-130B,E Hercules	60/75	24
"	P-3 Orion (on order 1976)		18
"	T-33,A Silver Star1,2	51/76	687
"	Vega V-146 Ventura I,II,V	42/57	286
<u>Martin Model</u>	187 Baltimore III	42/42	1
<u>Martinsyde</u>	F-6	22/25	1
<u>McDonnell</u>	F2H-3 Banshee	55/62	39
"	CF-101B,F Voodoo	61/75	66
<u>Noorduyn</u>	Norseman III,IV,VI	40/57	100
<u>North American</u>	F-86A Sabre	51/53	1
"	Harvard I,II,4,AT-6D	39/69*	2,256
"	NA-26	40/42	1
"	NA-44	40/44	1
"	NA-62B Mitchell I,II,III	42/63	164
"	NA-64 Yale	40/46	119
"	NA-122 Mustang IV	47/61	130
<u>Northrop</u>	A-17A Nomad	40/45	32
"	Delta I,II	36/45	20
<u>percival</u>	P.40 Prentice I	48/48	1
<u>Pitcairn</u>	Model PA-5 Mailwing	28/32	1
<u>Schweizer</u>	SGS 2-12, TG-3A	46/49	2
<u>S.E. 5a</u>		20/29	12
<u>Sikorsky</u>	S-51	47/65	7
"	S-55	52/69*	28
"	S-58	55/75*	6
"	S-61B(CH-124)	63/76	41
<u>Sopwith</u>	1F.1, 2F.1 Camel	24/29	10
"	7F-1 Snipe	19/23	3
<u>Stearman</u>	Model D-75N1, A75N1	42/43	301
<u>Stinson</u>	Model HW-75	40/46	25
<u>Supermarine</u>	Spitfire II,V,VII,XVI,XIV	40/50	8
"	Stranraer	38/46	40
"	Type 377 Seafire	46/54	35
"	Walrus I,II	43/47	8
<u>Vertol (Piasecki)</u>	Model PD-18	54/64	3
"	Model 42	54/69*	18
"	44	50/69*	2
"	107 Voyager (CH-113A)		12
"	107 Labrador (CH-113)(CH-46)	/75	6
"	CH-47C Chinook	74/75	8
<u>Vickers</u>	Viking IV	23/31	8
<u>Waco</u>	CG-4A Hadrian II	44/55	32
"	CG-15A	46/50	1
"	Model AQC-6	42/42	1
"	PG-2A	46/47	1
<u>Westland</u>	Lysander II,III	39/46	329
"	Wapiti II	30/44	25

#### CENTRAL AFRICAN REPUBLIC

<u>Aermacchi</u>	AL.60C5 Conestoga	73/75	10
<u>Aerospatiale</u>	Alouette II	73	1
<u>Dassault</u>	Falcon 20	73	1
<u>Douglas</u>	A-1	/75	
"	C-47	73	1
<u>Max Holste</u>	M.H.1521M	73	3

#### CHAD

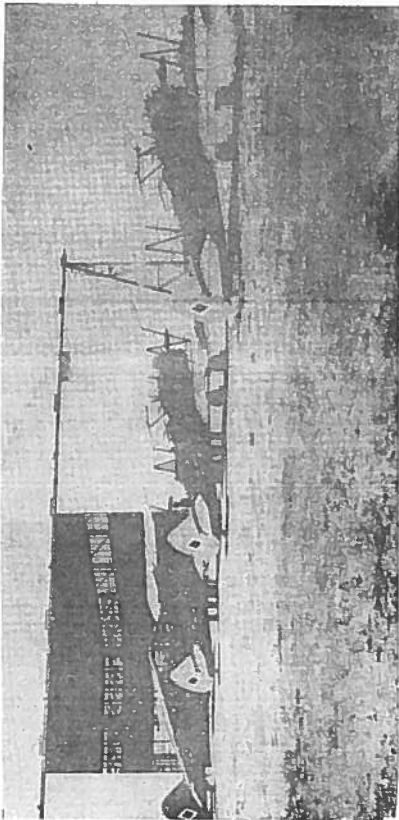
<u>Aerospatiale</u>	Alouette II	73	1
"	" III	73	
<u>Douglas</u>	A-1D	73/75	5
"	C-47	73	1
<u>Max Holste</u>	M.H.1521M	73	3
<u>Sikorsky</u>	H-34	73	

#### CHILE

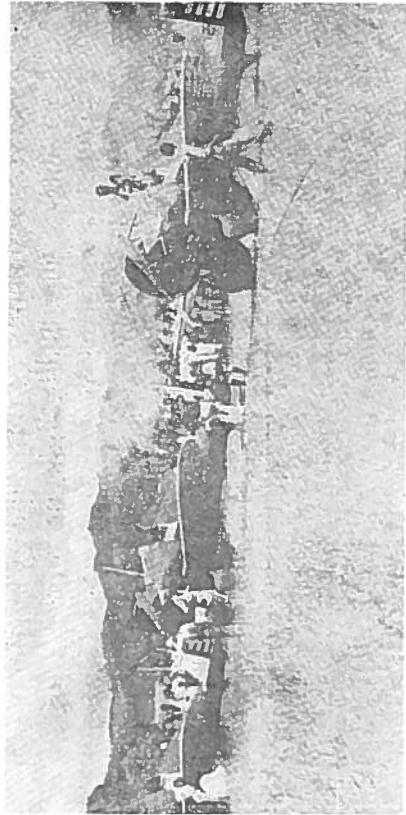
<u>Aerospatiale</u>	S.A.315 Lama	/76*	6
"	S.A.330 Puma	/75/76*	9
<u>Arado</u>	Ar95	35?/	
<u>Avro</u>	504-0		
"	626	35?/	
<u>Beechcraft</u>	C-45, D18S	55/76*	5
"	T-11B Kansan		
"	T-34 Mentor	53/76*	46
"	Twin bonanza, Model 1150	56/76*	5
"	99A	70/76*	9
<u>Bell</u>	47D,G,J	73/76*	12
"	206A Jet Ranger	73/76*	4
"	UH-1D,-1H	73/76*	2
<u>Bleriot</u>	50 h.p.	13/	4
"	75 h.p.	13/	2
<u>Boeing</u>	B-17G Flying Fortress		
<u>Bristol</u>	M.1C	17/	6
<u>Cessna</u>	A-37B, T-37B	/75/76*	
"	C-180	/57/76*	10
"	O-1 Bird Dog, L-19	/57/73	4
<u>Consolidated</u>	PBY-5A Catalina	41?/76*	3
<u>Curtiss</u>	Falcon		
"	Hawk III		
"	P-40	41?/	
<u>deHavilland</u>	D.H.4	22/	
"	Gipsy Moth		
"	Sea Vampire T.22	73/76*	6
"	Vampire T.55	55/76*	5
"	Canada DHC-2 Beaver	52/73	20
"	DHC-3 Otter	57/73	12
"	DHC-6	73/76*	11
<u>Deperdussin</u>		13/	
<u>Dornier</u>	Merkur		
"	Wal		
<u>Douglas</u>	A-24	41?/	
"	B-26 Invader	73/76*	15
"	C-47	/73/76*	25
"	C-118	/76*	5
"	DC-6B	73/76*	3
<u>Fairchild</u>	PT-19	41?/	
<u>Fairey</u>	IIIF		
<u>Fanero-Chile</u>	Chincol		50
<u>Focke-Wulf</u>	Fw44	35?/	
<u>Grumman</u>	HU-16B Albatross	73/76*	14
"	SA-16		
<u>Hawker</u>	Hunter FGA.71,FR10,T.72,T.77	73/76*18+	
"	Siddleley H.S. 748	73	1
<u>Hiller</u>	UH-12E	73/76*	10
<u>Junkers</u>	A-20		
"	R-42		
<u>Lockheed</u>	C-130E,H	73/76*	3
"	F-80	/76*	9
"	SP-2E Neptune	/76*	4
"	T-33A	73/76*	8
<u>Loening</u>	C-2		
<u>McDonnell</u>	Douglas A-4?		
<u>Nardi</u>	FN305	35?/	
<u>Nieva</u>	T-25	/76*	10
<u>North American</u>	AT-6, T-6G	41?/76*	20
"	B-25 Mitchell		
<u>Northrop</u>	F-5A,B,E,F	/75	21
<u>Piper</u>	Pa-28-6	/75	2
"	Pa-31 Navajo	/75	1
<u>Republic</u>	P-47D Thunderbolt		17
<u>Sanchez-Besh</u>		13/	
<u>SH-4</u>		/76*	6
<u>Sikorsky</u>	OS2U-3 Kingfisher	41?/	
"	S-38		
"	S-55T	73/76*	6
"	S-58	/75	
"	UH-19	/76*	4
<u>Vickers</u>	Vixen		
"	Wilbault		
<u>Voisin</u>		13/	
<u>Vultee</u>	BT-13 Valiant	41?/	

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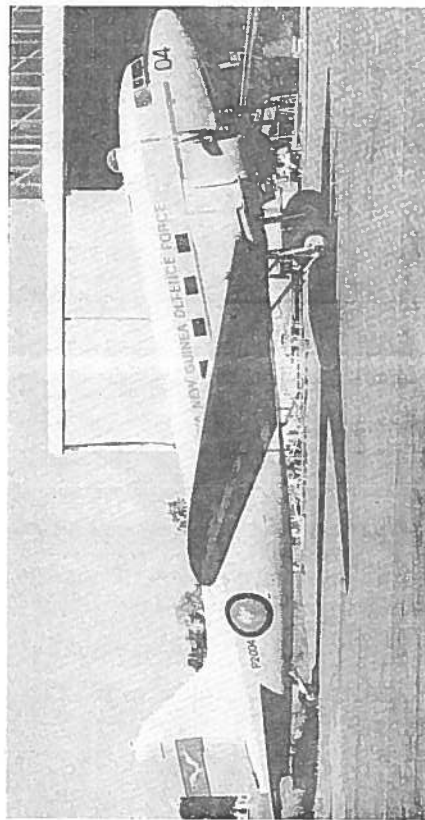
The first part of this series, AUSTRALIA to CAMEROON, appeared in SAFO #9. Anyone with additions or corrections, or anyone wishing to assist in this ambitious project should contact Chris Thornburg, 134 Governors Dr., Forest Park, GA 30050.



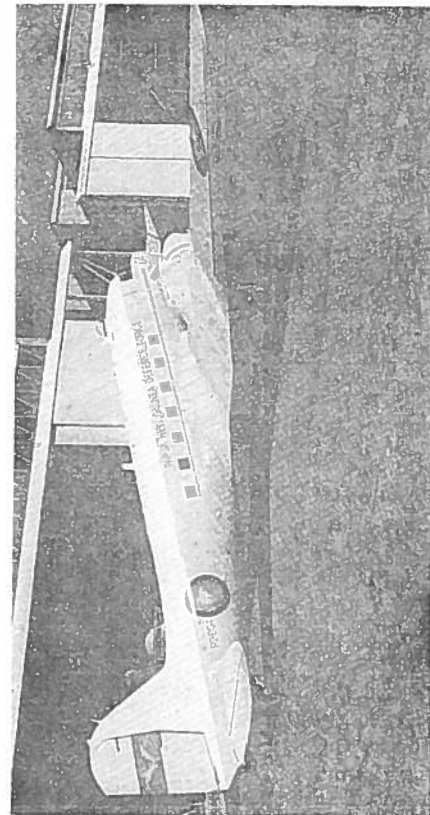
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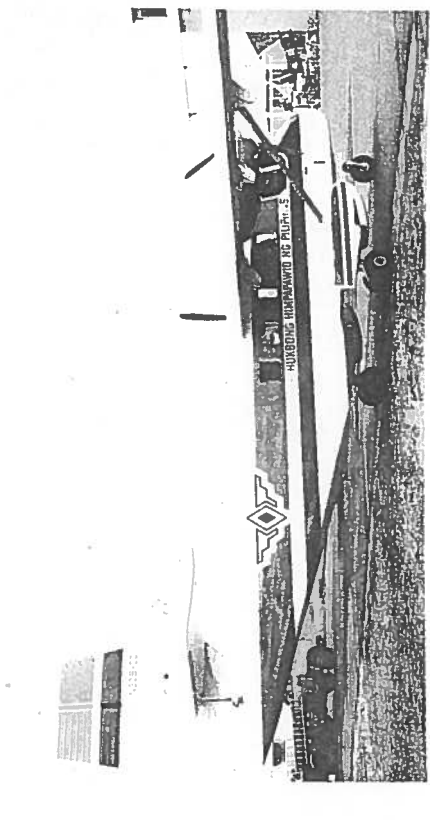
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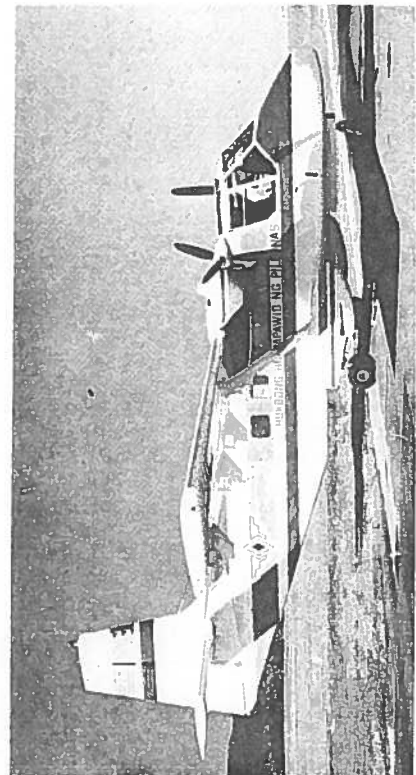
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